Ministry of Higher Education and Scientific Research

Scientific Supervision and Scientific Evaluation Apparatus

Directorate of Quality Assurance and Academic Accreditation

Accreditation Department

Academic Program and Course Description

College of Dentistry
Al-Turath University

Academic Year 2025-2026

جامعة التراث
كلية طب الاسنان
AL-TURATH UNIVERSITY
COLLEGE OF DENTISTRY

College of Dentistry

Ministry of Higher Education and Scientific Research

Academic Program Description Form

University Name	Al-Turath University
Faculty/Institute	College of Dentistry
Scientific Department	College of Dentistry - Integrated BDS Program (six scientific departments)
Academic or Professional Program Name	Dentistry
Final Certificate Name	Bachelor of Dental Surgery (B.D.S.)
Academic System	Annual system (two semesters per academic year)
Description Preparation Date	10-09-2025
File Completion Date	15-09-2025

Head of Department / Program	**Scientific Associate**
Name: Prof. Dr. Tahani Al-Sandook Date: 15/09/2025. Signature: Rep. A.	Name: Prof. Abd Al-Kareem Al-Azzawi Date: 15/09/2025. Signature: A.Ka
Checked by: Department of Quality Assurance and University Performance	**Approval of the Dean**
Director: Asst. Lec. Ahmed Basher Ayyed Date: 15/09/2025 Signature:	Prof. Dr. Tahani Al-Sandook Date: 15/09/2025 Signature: Rep. A. Karim

1. Program Vision

Development of highly skilled, ethical dental professionals who lead innovation and improve oral health locally and globally. The program fosters excellence through research, community engagement and contemporary dental education.

2. Program Mission

The program delivers comprehensive and innovative dental education that equips graduates with the knowledge, clinical skills, research capability and professional values required for safe patient care, community service and continued professional development.

3. Program Objectives

1. Provide a comprehensive foundation in biomedical, behavioral and dental sciences.
2. Develop progressive preclinical and clinical competence across the major dental disciplines.
3. Prepare graduates to assess patients, formulate evidence-informed treatment plans and provide safe patient-centered care.
4. Promote professionalism, ethical practice, communication, teamwork and respect for patients and communities.
5. Develop research literacy, critical thinking and the ability to interpret and apply scientific evidence.
6. Encourage prevention, community engagement and responsiveness to local oral-health needs.
7. Support innovation, use of contemporary dental technologies and continuous quality improvement.
8. Prepare graduates for lifelong learning, professional responsibility and leadership in dental practice.

4. Program Accreditation

The Bachelor of Dental Surgery program operates under the regulatory and quality-assurance requirements of the Iraqi Ministry of Higher Education and Scientific Research. No separate external program-accreditation certificate is recorded in the 2025-2026 academic program documentation; therefore, no external accreditation agency is claimed in this document.

5. Other External Influences

The program is influenced by national higher-education regulations, professional and ethical requirements, advances in dental science and technology, community oral-health needs, patient-safety expectations, economic and cultural factors, and relevant international evidence-based guidance used in periodic curriculum review.

6. Program Structure

Program Structure	Number of Courses	Credit Hours	Percentage	Reviews*
Institution Requirements	3	8	3.57%	Human Rights and Democracy, Arabic, Baath Crimes; all are required.
College Requirements	43	216	96.43%	Required BDS biomedical, dental, preclinical, clinical and research courses.

Program Structure	Number of Courses	Credit Hours	Percentage	Reviews*
Department Requirements	0	0	0.00%	The BDS curriculum is integrated at College level across the scientific departments.
Summer Training	Required	No credit	-	Compulsory summer training as specified by College and Ministry regulations.
Other	0	0	0.00%	None identified in the 2025-2026 curriculum.

** All courses are required/basic courses in the 2025-2026 curriculum unless otherwise specified.*

Program Description

The program is a five-year annual Bachelor of Dental Surgery curriculum. The table below follows the Ministry template and reports the theoretical and practical/clinical credit components separately. One theoretical contact hour per week is represented as two units and one practical/clinical contact hour per week as one unit in the documented curriculum structure.

Year/Level	Course Code	Course Name	Credit Hours - Theoretical	Credit Hours - Practical/Clinical
First	TUD101	Human Anatomy	2	2
First	TUD102	Computer Sciences	2	2
First	TUD103	Dental Anatomy	4	2
First	TUD104	Human Rights and Democracy	2	0
First	TUD105	Medical Chemistry	4	2
First	TUD106	Medical Physics	4	2
First	TUD107	Biology	4	2
First	TUD108	Terminology	2	0
First	TUD109	Arabic	4	0
Second	TUD201	Dental Materials	2	2
Second	TUD202	Prosthodontics	2	4
Second	TUD203	Oral Histology and Embryology	4	2
Second	TUD204	Biochemistry	4	2
Second	TUD205	General Histology	4	2
Second	TUD206	General Physiology	4	2
Second	TUD207	General Anatomy	2	2
Second	TUD208	Baath Crimes	2	0
Second	TUD209	Biosafety and Biosecurity	2	1
Third	TUD301	Microbiology	4	2
Third	TUD302	Pharmacology	4	2
Third	TUD303	Community Dentistry	2	2
Third	TUD304	Conservative Dentistry	2	2
Third	TUD305	Dental Radiology	2	2
Third	TUD306	General Pathology	4	2
Third	TUD307	Oral Surgery	2	2
Third	TUD308	Prosthodontics	2	2
Third	TUD309	Crown and Bridge	2	2
Third	TUD310	Dental Ethics	2	0
Fourth	TUD401	General Medicine	2	0
Fourth	TUD402	General Surgery	2	0
Fourth	TUD403	Oral Surgery	2	4
Fourth	TUD404	Conservative Dentistry and Endodontics	2	6
Fourth	TUD405	Oral Pathology	4	2
Fourth	TUD406	Orthodontics	2	4
Fourth	TUD407	Pedodontics	2	2
Fourth	TUD408	Periodontics	2	3
Fourth	TUD409	Prosthodontics	2	3

Year/Level	Course Code	Course Name	Credit Hours - Theoretical	Credit Hours - Practical/Clinical
Fifth	TUD501	Conservative Dentistry	2	6
Fifth	TUD502	Oral Medicine	2	4
Fifth	TUD503	Oral Surgery	2	6
Fifth	TUD504	Pediatric Dentistry	2	3
Fifth	TUD505	Prevention	2	3
Fifth	TUD506	Prosthodontics	2	6
Fifth	TUD507	Orthodontics	2	4
Fifth	TUD508	Periodontics	2	3
Fifth	TUD509	Research Method and Project	2	0

Supplementary Curriculum Workload Summary

Year	Courses	Theory h/week	Practical/Clinical h/week	Theory h/year	Practical/Clinical h/year	Total h/year	Credits
First	9	14	12	420	360	780	40
Second	9	13	17	390	510	900	43
Third	10	13	18	390	540	930	44
Fourth	9	10	24	300	720	1020	44
Fifth	9	9	35	270	1050	1320	53
Five-year total	46	59	106	1770	3180	4950	224

7. Expected Learning Outcomes of the Program

Outcome Code	Learning Outcome Statement
Knowledge	
A1	Explain core biomedical, behavioral and dental sciences and use appropriate scientific and dental terminology.
A2	Describe the properties, indications and safe use of dental materials, instruments, technologies and infection-control principles.
A3	Explain disease mechanisms, diagnosis, prevention and evidence-based management of common oral and dental conditions.
A4	Integrate patient information, investigations and scientific evidence to formulate comprehensive and appropriate treatment plans.
Skills	
B1	Obtain and interpret patient histories, clinical findings and relevant investigations to support diagnosis and treatment planning.
B2	Perform laboratory, simulation, preventive and clinical dental procedures safely and competently within the undergraduate scope of practice.
B3	Communicate effectively with patients, families, colleagues and the wider healthcare team and contribute constructively to teamwork.
B4	Apply critical thinking, research literacy, digital skills and self-directed learning for problem solving and continuing professional development.
Ethics	
C1	Demonstrate professionalism, respect for patient autonomy, informed consent, confidentiality and dignity.
C2	Prioritize patient safety, beneficence, non-maleficence, accountability and responsible clinical conduct.
C3	Demonstrate equity, cultural sensitivity, community responsibility and respect for diversity in oral healthcare.
C4	Apply ethical and legal reasoning to professional decisions and demonstrate commitment to lifelong professional development.

8. Teaching and Learning Strategies

Lectures and interactive discussions; laboratory and simulation exercises; supervised clinical training; case-based and problem-based learning; seminars and student reports; demonstrations; community-oriented activities; guided self-study; research and evidence appraisal; and use of digital learning resources. The strategies are selected according to the intended learning outcomes and the level of the course.

9. Evaluation Methods

Theoretical written examinations; oral and short-answer assessments where applicable; quizzes and continuous assessment; laboratory and practical examinations; objective assessment of simulation and clinical performance; clinical requirements and case completion; seminars, reports and assignments; research-project evaluation; and final examinations in accordance with University and College regulations.

10. Faculty

Academic Rank	General Specialization	Specialization	Special Requirements/Skills (if applicable)	Staff	Lecturer
Professor / Senior Academic	Dentistry / Medical Sciences	Multiple dental and supporting disciplines	Teaching, supervision, clinical or laboratory expertise as applicable	16	
Lecturer / Part-time or Visiting Academic	Dentistry / Medical Sciences	Multiple dental and supporting disciplines	Course-specific academic, clinical or laboratory expertise		14

Note: The 2025-2026 program roster identifies 30 teaching personnel across the staff and lecturer/part-time categories.

Professional Development

Mentoring New Faculty Members

New instructors are supported through workshops and seminars, guidance by senior instructors, departmental follow-up, open discussion and exchange of teaching experience. The process emphasizes continuous education, progressive development of teaching skills and regular academic support.

Professional Development of Faculty Members

Faculty members are encouraged to participate in workshops, seminars and continuing education; benefit from peer and senior-faculty experience; exchange ideas within departments; develop research and innovative educational practices; and strengthen leadership, independence and quality-oriented academic performance.

11. Acceptance Criterion

Admission is conducted in accordance with applicable Ministry and University regulations and the approved admission system. The 2025-2026 program specification also identifies the need for students to have the physical, mental and social capacity required for dental education and clinical practice and indicates use of a personal interview to assess suitability for the profession.

12. The Most Important Sources of Information about the Program

Iraqi Ministry of Higher Education and Scientific Research: Academic Program and Course Description Guide (2024); Al-Turath University College of Dentistry 2025-2026 program specification; First- through Fifth-Year course syllabi for 2025-2026; approved course textbooks and references; University and College quality-assurance records; and current scientific and professional literature used by individual courses.

13. Program Development Plan

1. Conduct annual program evaluation to identify strengths, weaknesses and improvement priorities.
2. Undertake evaluative studies to improve academic and clinical performance.
3. Review course content annually to incorporate appropriate scientific and professional developments.
4. Update quality-assurance guidance and institutional procedures in line with national requirements.
5. Review contemporary diagnostic, treatment, simulation and educational technologies.
6. Strengthen self-directed learning, research literacy and use of electronic library resources.
7. Develop and implement quality and accreditation strategies, action plans and follow-up mechanisms.

Program Skills Outline

The checked cells indicate the individual program learning outcomes addressed by each course in the 2025-2026 curriculum.

Year/Level	Course Code	Course Name	Basic or optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First	TUD101	Human Anatomy	Basic	✓		✓		✓			✓		✓		
First	TUD102	Computer Sciences	Basic		✓						✓		✓		✓
First	TUD103	Dental Anatomy	Basic	✓		✓			✓		✓		✓		
First	TUD104	Human Rights and Democracy	Basic							✓		✓		✓	✓
First	TUD105	Medical Chemistry	Basic	✓	✓	✓					✓		✓		
First	TUD106	Medical Physics	Basic	✓	✓	✓					✓		✓		
First	TUD107	Biology	Basic	✓		✓					✓		✓		
First	TUD108	Terminology	Basic	✓						✓	✓	✓			
First	TUD109	Arabic	Basic							✓		✓		✓	
Second	TUD201	Dental Materials	Basic	✓	✓	✓			✓		✓		✓		
Second	TUD202	Prosthodontics	Basic	✓	✓		✓	✓	✓		✓	✓	✓		
Second	TUD203	Oral Histology and Embryology	Basic	✓		✓		✓			✓		✓		
Second	TUD204	Biochemistry	Basic	✓		✓					✓		✓		
Second	TUD205	General Histology	Basic	✓		✓		✓			✓		✓		
Second	TUD206	General Physiology	Basic	✓		✓		✓			✓		✓		
Second	TUD207	General Anatomy	Basic	✓		✓		✓			✓		✓		
Second	TUD208	Baath Crimes	Basic							✓		✓		✓	✓
Second	TUD209	Biosafety and Biosecurity	Basic		✓				✓		✓		✓		✓
Third	TUD301	Microbiology	Basic	✓	✓	✓		✓	✓		✓		✓		
Third	TUD302	Pharmacology	Basic	✓		✓	✓	✓			✓		✓		
Third	TUD303	Community Dentistry	Basic			✓	✓	✓		✓	✓	✓		✓	✓
Third	TUD304	Conservative Dentistry	Basic	✓	✓	✓	✓		✓		✓		✓		

Year/Level	Course Code	Course Name	Basic or optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
Third	TUD305	Dental Radiology	Basic	✓	✓	✓	✓	✓	✓		✓		✓		
Third	TUD306	General Pathology	Basic	✓		✓		✓			✓		✓		
Third	TUD307	Oral Surgery	Basic	✓		✓	✓	✓	✓		✓	✓	✓		
Third	TUD308	Prosthodontics	Basic	✓	✓		✓	✓	✓		✓	✓	✓		
Third	TUD309	Crown and Bridge	Basic	✓	✓		✓		✓		✓		✓		
Third	TUD310	Dental Ethics	Basic							✓	✓	✓	✓	✓	✓
Fourth	TUD401	General Medicine	Basic	✓		✓	✓	✓		✓	✓	✓	✓		
Fourth	TUD402	General Surgery	Basic	✓		✓	✓	✓	✓	✓	✓	✓	✓		
Fourth	TUD403	Oral Surgery	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓
Fourth	TUD404	Conservative Dentistry and Endodontics	Basic	✓	✓	✓	✓	✓	✓		✓	✓	✓		
Fourth	TUD405	Oral Pathology	Basic	✓		✓	✓	✓			✓	✓	✓		
Fourth	TUD406	Orthodontics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fourth	TUD407	Pedodontics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Fourth	TUD408	Periodontics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fourth	TUD409	Prosthodontics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Fifth	TUD501	Conservative Dentistry	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fifth	TUD502	Oral Medicine	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fifth	TUD503	Oral Surgery	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fifth	TUD504	Pediatric Dentistry	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fifth	TUD505	Prevention	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fifth	TUD506	Prosthodontics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fifth	TUD507	Orthodontics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fifth	TUD508	Periodontics	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fifth	TUD509	Research Method and Project	Basic	✓		✓	✓				✓	✓	✓		✓

Course Description Form

TUD101 - Human Anatomy (First Year)

1. Course Name:	Human Anatomy
2. Course Code:	TUD101
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Lecturer: Asst. Lec. Riyam Abbas. Email: - riyam.abbas@uoturath.edu.iq Asst. Lec. Ahmad Mudhaffar. ahmed.mudhafar@uoturath.edu.iq

Supplementary Course Description

The course provides an overview of human anatomy, enables students to effectively know the actual site and relation of vital body structure, and equips students with the knowledge and skills to deal with clinical application and complication regarding to anatomical background.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of anatomy of head and neck
2- Able to identify different similar vital structure and ability to effectively distinguishing between them
3- Apply theoretical knowledge in a practical setting during human anatomy labs, enhancing their clinical competencies.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) lab	Lec. Introduction to Human Anatomy Descriptive Anatomic Terms Lab. Introduction to anatomy	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
2	(1) theory (2) lab	Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae Basic structures part 1 (Skin, Fasciae, Muscle, Joints, Ligament, Bursae)	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) lab	Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System Basic structures part 2 (bone,Cartilage, Blood Vessels, Lymphatic System) and classification of human skeleton	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) lab	Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System Basic structures part 3(Nervous System, Mucous Membranes, Serous Membranes)	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) lab	Basic Structures: Nervous System, Mucous Membranes, Serous Membranes Frontal Bone, Parietal bones	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
6	(1) theory (2) lab	Skeletal system of the body: Skull: Cranial Bones Occipital bone	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
7	(1) theory (2) lab	Skeletal system of the body: Skull: Cranial Bones Temporal bones	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) lab	Skeletal system of the body: Skull: Facial Bones	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) lab	Skeletal system of the body: Skull: Facial Bones Ethmoid bone	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	theory (2) lab	External Views of the Skull Zygomatic bones, Maxillae	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	theory (2) lab	External Views of the Skull Nasal bones, Lacrimal bones, Vomer, Palatine bones, Inferior conchae	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	theory (2) lab	The Cranial Cavity Major Foramina and Fissures locations and structures pass through Neonatal Skull Mandible	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	theory (2) lab	The Cranial Cavity Major Foramina and Fissures locations and structures pass through Neonatal Skull External Views of the Skull	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	theory (2) lab	Skeleton of the Orbital Region, Openings into the Orbital Cavity Skeleton of the External Nose, nasal cavity, Paranasal Sinuses Auditory ossicles Hyoid bone Cranial cavity	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
15	theory (2) lab	Skeleton of the Orbital Region, Openings into the Orbital Cavity Skeleton of the External Nose, nasal cavity, Paranasal Sinuses Auditory ossicles Hyoid bone Major Foramina and Fissures locations and structures pass through the skull	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) lab	The Vertebral Column Orbit	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) lab	The Vertebral Column nasal cavity	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) lab	Structure of the Thoracic Wall Joints of the Chest Wall Suprapleural Membrane Diaphragm Surface Anatomy auditory ossicles , Hyoid bone	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) lab	Structure of the Thoracic Wall Joints of the Chest Wall 4 Suprapleural Membrane Diaphragm Surface Anatomy General Characteristics of a Vertebra	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) lab	Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs Vertebral column	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) lab	Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs Structure of the Thoracic cage (Sternum ,Ribs, Costal Cartilages)	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) lab	Pericardium, Heart, Large arteries, veins and nerves of thorax Thoracic cavity (Mediastinum, Pleurae, Trachea, Bronchi)	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) lab	Pericardium, Heart, Large arteries, veins and nerves of thorax lung	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) lab	. Pericardium, Heart, Large arteries, veins and nerves of thorax Anatomy of heart	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) lab	Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper extremities Major arteries, veins and nerves of thorax	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) lab	Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper extremities Bones of the Shoulder (Pectoral girdle) girdles	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) lab	Bones of the Pelvic girdle Bones of the Lower extremities Bones of the Upper extremities	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) lab	Bones of the Pelvic girdle Bones of the Lower extremities Bones of the Pelvic girdle	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
29	(1) theory (2) lab	Abdominal cavity and organs Bones of the Lower extremities	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) lab	Abdominal cavity and organs Abdominal cavity and organs	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Snell RS. Clinical Anatomy by Regions. 9th. edition. Philadelphia, PA: Lippincott Williams & Wilkins. 2012 2-Hansen JT: Netter's Clinical Anatomy, 3rd edition. E-Book with Online Access. Elsevier Health Sciences, 2014. Recommended books and references: Journals Oral Surgery, Oral Medicine.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD102 - Computer Sciences (First Year)

1. Course Name:	Computer Sciences
2. Course Code:	TUD102
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	15-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Ahmed Abdul Karim Talib Email: - ahmedabdkarem2@gmail.com

Supplementary Course Description

This course introduces fundamental computer concepts and skills. Students will gain knowledge of computer components like hardware, software, operating systems, as well as basic software applications. These includes word processing, spreadsheets, presentations, and internet usage. The course will also explore basic networking concepts, cybersecurity principles, and an introduction to artificial intelligence (AI).

8. Course Objectives

Cognitive Goals
Understand computer hardware and software.
Understand operating systems and their functions.
Understand Word, Spreadsheets, Presentation Software and their functions.
Understand computer Security and networks
Understand Cloud and AI.

Skills Goals (Specific to the Course)
Problem-Solving Skills: Apply logical and analytical thinking to computer-related problems.
Technical Skills: Troubleshoot basic computer hardware and software issues.
Research and Information Literacy Skills: Find, evaluate, and use relevant information.
Communication Skills: Communicate technical information effectively.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Providing the theoretical part of the course
2. Laboratory work:
Purpose: Enhance student ability to manipulate the computer.
Approach: Allows the student to master microscopic reading and setting.
3. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) lab	Introduction to Computer: Concepts of Hardware and Software with their components.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) lab	Introduction to Computer (Cont.): Concept of Computing, Data and Information; Applications of Information Connecting input/output devices, and peripherals to CPU.	Computer	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) lab	Computer Components: Computer Portions, Hardware Parts, I/O Units.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) lab	Computer Components (Cont.): Memory Types: Volatile and Non-Volatile Memory, Secondary Storage.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) lab	Computer Components (Cont.): CPU Components: Control Unit (CU), Arithmetic Logic Unit (ALU) and Registers; Computer Ports, Personal Computer (Features and Types)	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (2) lab	Operating System and Graphical User Interface GUI: Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques; Use of Common Icons, Status Bar, Using Menu and Menu-selection,	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (2) lab	Operating System and Graphical User Interface GUI (Cont.): Concept of Folders and Directories, Opening and closing of different Windows; Creating Short cuts. Customization and Personalization of GUIs, Accessibility Features in GUIs, User Experience (UX)	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) lab	Word Processing: Word Processing Basics; Basic Features of Word Processors, Opening and Closing of documents;	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) lab	Word Processing (Cont.): Text creation and Manipulation; Formatting Text and Paragraphs, Using Templates for Document Creation.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) lab	Word Processing (Cont.): Creating and Managing Tables, Utilizing Styles and Themes; Spell Check and Grammar Tools, Using Headers and Footers.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (2) lab	Spread Sheet: Introduction to Spreadsheet Software, Creating and Formatting Worksheets.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) lab	Spread Sheet (Cont.): Sorting and Filtering Data, Using Formulas and Functions.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
13	(1) theory (2) lab	Spread Sheet (Cont.): Using Formulas and Functions, Using Pivot Tables for Data Analysis; Data Validation and Error Checking, Data Visualization: Creating Charts and Graphs.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (2) lab	Presentation Software: Introduction to Presentation Software, Overview of Popular Presentation Tools, Creating a New Presentation.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) lab	Presentation Software (Cont.): Using Templates and Themes, Inserting and Formatting Text and Images, Transition and Animation Effects	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) lab	Presentation Software (Cont.): Using Speaker Notes and Timers, Advanced Features: Hyperlinks and Action Buttons.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) lab	Introduction to Internet and Web Browsers: Computer networks Basic; LAN, WAN. Concept of Internet and its Applications;	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) lab	Introduction to Internet and Web Browsers (Cont.): connecting to internet. World Wide Web; Web Browsing software's, Search Engines. Understanding URL; Domain name; IP Address.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) lab	Communications and Emails: Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration. 1	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) lab	Communications and Emails (Cont.): Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) lab	Introduction to Cloud Computing and Services: Definition of Cloud Computing and its concept, Cloud-Based Office Suites (Office 365 and Google Workspace).	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) lab	Introduction to Cloud Computing and Services (Cont.): Google Workspace: Google Docs, Google Sheets, Google Drive, Google Meet.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) lab	Security and Networking: What is a network? Types of networks. Basic network components.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) lab	Security and Networking (Cont.): Network Security Basics. Understanding network threats.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) lab	E-Commerce: (This section explores the concept of electronic commerce, focusing on online banking services like ATM and debit card services, phone banking, and mobile banking.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
26	(1) theory (2) lab	Introduction to AI: Definition of AI, History of AI, AI Techniques and Approaches.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) lab	Introduction to AI(Cont.): Key Characteristics of AI, Benefits of AI, Challenges and Ethical considerations.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) lab	The Role of AI in Modern Smartphones: (This explores the applications of AI in mobile devices like virtual assistants, AI-powered cameras, and personalized recommendations.)	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (2) lab	Applications and Tools of AI: Overview of AI Applications in Various Industries, Education and Healthcare.	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) lab	The Future of AI: (This section looks ahead to the future of Artificial Intelligence. It discusses emerging trends, recent research developments, and the potential of future AI technologies.)	Computer	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Main Reference: Graham Brown, David Watson, "Cambridge IGCSE Information and Communication Technology", 3rd Edition (2020) Alan Evans, Kendall Martin, Mary Anne Poatsy, "Technology In Action Complete", 16th Edition (2020) Ahmed Banafa, "Introduction to Artificial Intelligence (AI)", 1st Edition (2024) Microsoft Office 2019 Step by Step 1st Edition by Curtis Frye & Joan Lambert
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD103 - Dental Anatomy (First Year)

1. Course Name:	Dental Anatomy
2. Course Code:	TUD103
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	15-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Ali Huaham

Supplementary Course Description

The Dental Anatomy course provides students with a comprehensive understanding of the structure, function, and development of the teeth and oral cavity. Students will learn the detailed anatomy of human dentition, including tooth morphology, eruption patterns, and occlusion. The course covers the identification and classification of teeth, as well as their relationship to surrounding oral tissues. Emphasis is placed on practical skills, including tooth carving and recognition of anatomical landmarks. This foundational knowledge is essential for clinical practice and restorative dentistry.

8. Course Objectives

Upon completing the Dental Anatomy course, students will be able to identify and classify teeth, understand their morphology and eruption patterns, and demonstrate skill in tooth carving. They will apply knowledge of tooth relationships and occlusion to clinical practice. Students will recognize anatomical landmarks and variations in dentition for accurate diagnosis and treatment planning

9. Teaching and Learning Strategies

Designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college, enhance student ability to diagnose and treat the patients.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	1	Athorough knowledge of dental anatomy, morphology and function of each tooth. special emphasis of tooth morphology and and its clinical implication in the dental practice. Students acquire knowledge to identify	Introduction Nomenclature Heterodent Diphyodont The Deciduous Teeth The Permanent Teeth Anterior and Posterior Teeth The Jaw Numbering Systems	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
2	1		Tooth parts Enamel	A theoretical lesson using	Not separately specified in the source syllabus.
3	1		Anatomical Landmarks Cusp, Tubercle, Cingulum, Ridge, Fossa, Developmental groove, Pit, mamelons, sulcus, perikymata, fissure, root trunk, furcation, periodontium: Alveolar Bone Tooth Root Surface Periodontal ligament Gingiva Alveolar mucosa	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
4	1		Permanent Maxillary Central Incisor	A theoretical lesson using	Not separately specified in the source syllabus.
5	1		Permanent Maxillary Lateral Incisor Principal identifying features (Labial Aspect, Mesial Aspect, Distal Aspect, Lingual Aspect, Incisal Aspect).	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
6	1		Permanent Mandibular Incisors Characteristic features of Permanent mandibular Incisors Permanent Mandibular Central Incisor Principal identifying features Permanent Mandibular Lateral Incisor Principal identifying features Some differences between maxillary and mandibular central incisors Main differences between mandibular central and lateral incisors	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
7	1		Permanent Canines General Characteristic Features of the Canines The Permanent Maxillary Canine Principal Identifying Features The Permanent Mandibular Canine Principal Identifying Features Some differences between maxillary and mandibular canines.	A theoretical lesson using Power Point	Not separately specified in the source syllabus.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
8	1		Permanent Maxillary Premolars Some characteristic features to all posterior teeth Maxillary First Premolar Principal identifying features: Maxillary Second Premolar Principal identifying features Some differences between Maxillary First Premolar and Maxillary Second Premolar	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
9	1		Permanent Mandibular Premolars Mandibular First Premolar Characteristics that resemble those of the mandibular canine. Characteristics that resemble those of the mandibular second premolar. Principal Identifying Features	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
10	1		Permanent Mandibular Second Premolar Principal Identifying Features Some differences between Mandibular First Premolar and Mandibular Second Premolar	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
11	1		Permanent Maxillary Molars Maxillary First Molar Principal Identifying Features	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
12	1		Maxillary second Molar Principal Identifying Features Maxillary third Molar Principal Identifying Features	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
13	1		Permanent Mandibular Molars Mandibular First Molar Principal Identifying Features Permanent Mandibular Second Molar Principal Identifying Features Mandibular Third Molar Principal Identifying Features	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
14	1		Tooth Development Eruption of Teeth Crown and Root Development Steps Sequential Order of Deciduous Teeth and permanent teeth According to their Eruption Times The Importance of Deciduous Teeth Principal Differences	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
15	1		Pulp Cavities Root canal types Pulp Shape in Anterior Teeth Pulp Shape in Premolars Pulp Shape in Molars Pulp Cavities Shapes in Cross-Section of Teeth	A theoretical lesson using Power Point	Not separately specified in the source syllabus.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
16	1		Occlusion Angle's classes of jaw relationships: A. Ideal Class I Occlusion B. Class II Malocclusion C. Class III Malocclusion Types of anterior teeth relationship: Types of Molars relationships in cross section:	A theoretical lesson using Power Point	Not separately specified in the source syllabus.
1	2	Aligned with the stated course learning outcomes.	Introduction to dental anatomy , Carving Instruments , Numbering systems, Practical demonstration of Carving a Cube (1 cm*1cm*1cm)& Introduction to Anatomical landmarks on Teeth models	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
2	2	Aligned with the stated course learning outcomes.	Description & Carving of the Labial & Incisal Aspects & Finishing of P. Max. Right central incisor	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
3	2	Aligned with the stated course learning outcomes.	Practical Training of Carving of P. Max. Right central incisor.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
4	2	Aligned with the stated course learning outcomes.	Practical Exam. Of Carving of P. Max. Right central incisor	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
5	2	Aligned with the stated course learning outcomes.	Description & Carving of the labial & Mesial & Incisal Aspects & Finishing of P. Max. Right Canine.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
6	2	Aligned with the stated course learning outcomes.	Practical Training. Of Carving of P. Max. Right Canine.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
7	2	Aligned with the stated course learning outcomes.	Practical Exam. Of Carving of P. Max. Right Canine.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
8	2	Aligned with the stated course learning outcomes.	Description & Carving of the Buccal & Mesial & Occlusal Aspects & Finishing of P. Max. Right 1St Premolar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
9	2	Aligned with the stated course learning outcomes.	Practical Training of Carving of P. Max. Right 1St Premolar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
10	2	Aligned with the stated course learning outcomes.	Practical Exam. of Carving of P. Max. Right 1St Premolar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
11	2	Aligned with the stated course learning outcomes.	Description & Carving of the Buccal & Mesial & Occlusal Aspects & Finishing of P. Mand. Right 1St Premolar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
12	2	Aligned with the stated course learning outcomes.	Practical Training. Of Carving of P. Mand. Right 1St Premolar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
13	2	Aligned with the stated course learning outcomes.	Practical Exam. Of Carving of P. Mand. Right 1St Premolar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
14	2	Aligned with the stated course learning outcomes.	Description & Carving of the Buccal & Mesial & Occlusal Aspects & Finishing of P. Max. Right 1St molar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
15	2	Aligned with the stated course learning outcomes.	Practical Training of Carving of P. Max. Right 1St molar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
16	2	Aligned with the stated course learning outcomes.	Practical Exam. of Carving of P. Max. Right 1St molar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
17	2	Aligned with the stated course learning outcomes.	Description & Carving of the Buccal & Mesial & Occlusal Aspects & Finishing of P. Mand. Right 1St molar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
18	2	Aligned with the stated course learning outcomes.	Practical Training of Carving of P. Mand. Right 1St molar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
19	2	Aligned with the stated course learning outcomes.	Practical Exam. of Carving of P. Mand. Right 1St molar.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
20	2	Aligned with the stated course learning outcomes.	Final Practical Exam. Of tooth Carving.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Woelfel's dental anatomy, its relevance to dentistry. by Ricken C Scheid. Wheeler's Atlas of Tooth Form By Major M Ash.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD104 - Human Rights and Democracy (First Year)

1. Course Name:	Human Rights and Democracy
2. Course Code:	TUD104
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	15-09-2025
5. Available Attendance Forms:	Comprehensive onsite theoretical learning.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 0 hour/week; Total annual contact hours: 30; Total units: 2 (Theory units: 2; Practical/Clinical units: 0).
7. Course administrator's name (mention all, if more than one name)	Not separately specified in the 2025-2026 course specification.

Supplementary Course Description

The course introduces students to civil and political rights and public freedoms, their historical development, and the principal national and international frameworks that protect them. It also introduces the concept of democracy, the foundations of a democratic state, and the principal forms of democratic systems, enabling students to understand their rights, responsibilities, and civic role.

8. Course Objectives

Upon completion of the course, students should be able to:
1. Explain the concept, historical development, and principal categories of human rights.
2. Describe civil and political rights, public freedoms, and the national, regional, and international frameworks that protect them.
3. Explain the concept of democracy, the foundations of a democratic state, and the principal forms of democratic systems.
4. Demonstrate awareness of individual rights, responsibilities, and respect for human dignity in academic, professional, and community contexts.

9. Teaching and Learning Strategies

Lectures and guided classroom discussion are used to introduce the principles and historical development of human rights and democracy. Case-based discussion, comparative examples, student presentations, and critical-thinking activities are used to relate rights and democratic concepts to contemporary civic and professional contexts.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	1	Definition of human rights	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
2	1	The historical development of the idea of human rights	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
3	1	The idea of human rights in heavenly laws	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
4	1	The development of human rights in the Middle Ages and modern	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
5	1	Public freedoms / definition of public freedoms	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
6	1	Types of public rights and freedoms	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
7	1	Human rights in national, globa and regional declarations of rights	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
8	1	Human Rights Declarations in Britain	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
9	1	Declaration of Human Rights i the United States of America	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
10	1	Declaration of Human Rights in France	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
11	1	Universal Declaration of Huma Rights	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
12	1	Human rights in regional conventions	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
13	1	Arab Charter on Human Rights	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
14	1	NGOs and Human Rights	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
15	1	Human rights guarantees	Human Rights	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
16	1	Democratic system	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
17	1	Definition of democracy	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
18	1	Direct Democracy	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
19	1	Institutions of direct democrac	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
20	1	Representative Democracy	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
21	1	Characteristics of representative democracy	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
22	1	Representative Democracy in Iraq	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
23	1	Semi-direct democracy	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
24	1	Images of semi-direct democracy	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
25	1	Popular Proposal	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
26	1	Removal of the deputy	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
27	1	Popular solution	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
28	1	Removal of the President of the Republic	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
29	1	Popular referendum	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams
30	1	Popular objection	Democracy	Theoretical lecture using Power Point	Daily, monthly, semi-annual and final exams

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%

	Theory	Practical	Total
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Main Reference: Recommened websites.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD105 - Medical Chemistry (First Year)

1. Course Name:	Medical Chemistry
2. Course Code:	TUD105
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	15-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Lec. Dr. Rana Hussein Email: - Rana.Hussein@uoturath.edu.iq

Supplementary Course Description

This course provides dental students with a fundamental understanding of chemistry, focusing on the molecular basis of life and its relevance to oral health. Topics include the structure and function of biomolecules, metabolic pathways, and their regulation, as well as the chemical processes involved in oral tissues, saliva composition, and dental caries. The course aims to integrate chemical principles with clinical dentistry, preparing students for advanced studies in oral biology and patient care.

8. Course Objectives

Cognitive goals.
1. Student will understand classifications of acid and base
2. Student will be able understand the Stereoisomers classification
3. Student will be able to understand the chemistry of carbohydrate
4. Student will be able to differentiate between the Alkanes and Cycloalkanes & Aromatic compounds
5. Student will understand classifications carbohydrates, lipids , proteins , amino acid and Nucleic Acids.

The skills goals special to the course.
1. laboratory skills
2. Evidence base theory
3. Research skills

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1- Lectures and laboratory: TO provide the theoretical component of the course
2. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(2) theory (2) lab	1- Acid, Base and Salt And Action of Strong Base and Acids (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(2) theory (2) lab	2- Salts, preparation of salts And Solubility rules and Applications (Solubility rules of salts). (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(2) theory (2) lab	3- Fluid and electrolyte And Test for negative ions (Anions).part 1 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(2) theory (2) lab	4- Buffer-pH and Acid-Base Balance And Test for negative ions (Anions). part 2 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(2) theory (2) lab	5- acid-base balance and blood pH And PH meter (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(2) theory (2) lab	6- Colloids and colloidal dispersions And Test for positive ions (Cations). part 1 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(2) theory (2) lab	7- Chirality in Biological Systems And Test for positive ions (Cations). part 2 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(2) theory (2) lab	8- concentration, preparation of solutions And Titration(LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(2) theory (2) lab	9- Pollution And Safety of chemicals part 1 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(2) theory (2) lab	10- Radiochemistry And Safety of chemicals part2(LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(2) theory (2) lab	11- Alkanes and Cycloalkanes And Hydrocarbons(LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(2) theory (2) lab	12- Alkenes and Alkynes And Aliphatic Hydrocarbons (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(2) theory (2) lab	13- Aromatic compounds And Aromatic hydrocarbons, part 1 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(2) theory (2) lab	14- Aromatic compounds in Nature And Aromatic hydrocarbons, part 2 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(2) theory (2) lab	15- Stereoisomers of Carbon And Preparation of aspirin (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(2) theory (2) lab	16- Diastereomers And Alcohol(LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
17	(2) theory (2) lab	17- Alcohols, Phenols, Ethers and Thiols (preparation, reactions) And Phenols reactions(LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(2) theory (2) lab	18- Carboxylic Acids And Their Derivatives , part 1 And (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(2) theory (2) lab	19- Carboxylic Acids And Their Derivatives , part 2 And Carboxylic Acids reactions part 2 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(2) theory (2) lab	20Aldehydes and ketones And (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(2) theory (2) lab	And Carbohydrates reactions (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(2) theory (2) lab	22- Monosaccharide's And (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(2) theory (2) lab	23- Disaccharides Carbohydrates and oral health And (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(2) theory (2) lab	24- Lipids And Lipids reactions part 1(LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(2) theory (2) lab	25- Derived lipids The role of lipids in teeth diseases And Lipids reactions part 2(LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(2) theory (2) lab	26- Proteins And Proteins reactions (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(2) theory (2) lab	27- Amino acids Effects of protein on oral health And (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(2) theory (2) lab	28- Nucleic Acids And Paper chromatography part 1(LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(2) theory (2) lab	29- Nucleosides, Nucleotides And Paper chromatography part 2 (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(2) theory (2) lab	30- Dioxy and ribo Nucliec acids And Osmosis (LAB)	Medical chemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%

	Theory	Practical	Total
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. Books Required reading: Chemistry for Dental Students Vol II: Organic and Physiological Dental Chemistry by H. Carlton Smith and Rachel M. Smith
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD106 - Medical Physics (First Year)

1. Course Name:	Medical Physics
2. Course Code:	TUD106
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	15-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Linda Ismail Email: - linda.ismail.mohi@uoturath.edu.iq

Supplementary Course Description

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the program specification.

8. Course Objectives

Cognitive goals.
Student will understand the medical terms of Physics and its applications
Student will be able to differentiate between all branches of Physics
Student will be able to understand the application of laser
Student will be able to define and explain x-ray diagnostic
Student will have a background about all the medical applications of Physics
The skills goals special to the course.
laboratory skills
Evidence base theory
Research skills
Teaching and Learning Methods
Data show.
Books
Theoretical lectures.
Laboratory slides.
Research papers analysis.
Assessment methods
Oral Exams.
Written exams.
Slides discussion exams.
Idea and problem analysis exams
C. Affective and value goals
Increase the student skills to understand the scientific subjects
Increase the ability of student how to answer about all type of exam questions

General and rehabilitative transferred skills (other skills relevant to employability and personal development)
Optimizing dentist decision making

Chances analysis to choose the best option

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1- Lectures and laboratory: TO provide the theoretical component of the course
2. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1+2	(2) theory (2) lab	Terminology (terms of medical Physics) and Guidelines of medical Physics lab and rules (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3+4	(2) theory (2) lab	Force on & in the body And Graphing Techniques (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5+6	(2) theory (2) lab	Physics of skeleton And Ohm law (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
7+8	(2) theory (2) lab	Heat and cold in medicine And semiconductors junction diode (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
9+10	(2) theory (2) lab	Energy work and power of the body And Cathode ray oscilloscope (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11+12	(2) theory (2) lab	Pressure And Hook law (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13+14	(2) theory (2) lab	Electricity within the body and The focal length of convex lens (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15+16	(2) theory (2) lab	Sound in medicine And laser applications (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17+18	(2) theory (2) lab	Ultrasound in medicine And Boyle's law	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19+20	(2) theory (2) lab	Light in medicine And Focal length of concave mirror (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21+22	(2) theory (2) lab	Laser in medicine And Inverse square law (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
23+24	(2) theory (2) lab	Physics of eye and vision And viscosity of a liquid (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25+26	(2) theory (2) lab	Physics of diagnostics x-ray And Velocity of the sound (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27+28	(2) theory (2) lab	Physics of nuclear medicine And The focal length of a convering lens (LAB)	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29+30	(2) theory (2) lab	Physics of radiation therapy (LAB) Simple pendulum	Medical Physics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. Books Required reading: Fundamentals of Physics, by David Halliday, Robert Resnick, and Jearl Walker, 12th Edition, 2021 by Wiley.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD107 - Biology (First Year)

1. Course Name:	Biology
2. Course Code:	TUD107
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	15-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Mohammed Jasim Al-Obaidi Email: - mohammed.jasim@turath.edu.iq

Supplementary Course Description

This course is being designed to understand the branches of biology and their importance, cell structure and its organelles, bacterial structures and shapes. As well as introduce the students to the immunity and identify their type and cells. The cellular metabolism and energy production, the cellular reaction and cellular transports, explanation about cellular divisions all being produced in a detailed methodology. In addition, further knowledge about stem cells and their medical applications, parasite.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of different biological concepts, as well as cell biology details the emphasis on human anatomy and physiology relevant to dental practice.
2- Able to identify the types of human system and their roles in homeostasis and overall health.
3- Gain the fundamental knowledge of microbiology and its impact on oral health.
4- Apply theoretical knowledge in a practical setting during biology laboratory sessions, enhancing exchange knowledge.
5- Apply biological principles to address real-world dental cases as well as the pathophysiology, that contribute to evidence-based dental practice.
6- Integrate knowledge from medical biology with clinical dental studies (such as dental anatomy, dental materials, and dental surgery) to understand the biological basis of dental procedures and treatments.
7-Engage in scientific inquiry and critical thinking by analyzing biological data and conducting experiments, with a focus on their application in dental research and clinical scenarios.

9. Teaching and Learning Strategies

Designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of biological concepts.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance understanding.
2. Laboratory work:
Purpose: Enhance student ability to manipulate the microscopic.
Approach: Allows the student to master microscopic reading and setting.
3. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(2) theory (2) lab	1- introduction to medical and oral biology And Laboratory safety (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(2) theory (2) lab	2- prokaryotes & eukaryotes And Parts of microscope (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(2) theory (2) lab	3- general and oral immunity And Types of cells (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(2) theory (2) lab	4- bacterial and oral disease And Simple epithelial tissue (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(2) theory (2) lab	5- genetics and its role in oral disease And Stratified epithelia tissue (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(2) theory (2) lab	6- simple epithelial tissues(tongue) And Glandular epithelial tissue (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(2) theory (2) lab	7- stratified epithelial tissues And Serous, Mucous, Sero-mucous cell glands (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(2) theory (2) lab	8- glandular epithelial tissues (salivary gland) And Proper connective tissue, Loose (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(2) theory (2) lab	9- general connective tissues And Proper connective tissue, dense (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(2) theory (2) lab	10- muscular tissues And Special connective tissue, type of cells (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(2) theory (2) lab	11- nerve tissues And Cartilage, Hyaline, Elastic, Fibro (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(2) theory (2) lab	12- cell structure And Compact and spongy bone (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(2) theory (2) lab	13- plasma membrane structure And Human Blood, W.B.C , R.B.C and frog blood (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
14	(2) theory (2) lab	14- passage of material cross the cell membrane And Muscular tissue: Skeletal, cardiac and smooth muscles (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(2) theory (2) lab	15- cell cycle And Nerve cell (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(2) theory (2) lab	16- mitosis & miosis And Central and peripheral nerve system (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(2) theory (2) lab	17- cell energy And Spinal cord and meninges (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(2) theory (2) lab	18- nucleic acid (DNA & RNA) And Entamoeba histolytica , Entamoeba coli (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(2) theory (2) lab	19- introduction to parasitology And Giardia lamblia , Trichomonas vaginalis (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(2) theory (2) lab	20-Types of parasites and host And Leishmania tropica,Leshmania donovani (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(2) theory (2) lab	21- General and oral protozoa And Trypanosoma gambiense,T.rhodesiense (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(2) theory (2) lab	22- Plasmodium vivax, Toxoplasma gondii And Human amoebas,E. histolytica, E.coli, E.gingivalis (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(2) theory (2) lab	23- Flagellates, Giardia lamblia, Trichomonas tenax, T.hominas, T.vaginalis And Balantidium coli (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(2) theory (2) lab	24- Leishmania , cutaneous and vesiral And Echinococcus granulosus,Taenia saginata Taenia solium (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(2) theory (2) lab	25- Sporozoa, Plasmodium spp. And Ancylostoma, Ascaris , Entrobius (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(2) theory (2) lab	26- Toxoplasma gondii And Schistosoma spp, Fasciola hepatica (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
27	(2) theory (2) lab	27-Nemathelminthes, Ascaris lumbricoides, And Endoskeleton of frog (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(2) theory (2) lab	28- Ancylostoma duodenale, Entrobius vermicularis And Experiment...examine samples of water (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(2) theory (2) lab	29- Platyhelminthes, Fasciola hepatica And Experiment...examine samples of water Experiment Blood groups (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(2) theory (2) lab	30- Schistosoma spp. and Experiment ...Blood groups (LAB)	biology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Main Reference: Basic Sciences for Dental Students, 1st edition 2017 by Simon A. Whawell and Daniel W. Lambert Electronic references or websites: https://bmcbiol.biomedcentral.com/ Extra-references or websites: The Selfish Gene" by Richard Dawkins. "The Diversity of Life" by Edward O. "The Immortal Life of Henrietta Lacks" by Rebecca Skloot. "The Origin of Species" by Charles Darwin. "The Sixth Extinction" by Elizabeth Kolbert. "The Hidden Life of Trees" by Peter Wohlleben.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD108 - Terminology (First Year)

1. Course Name:	Terminology
2. Course Code:	TUD108
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning combining theoretical and visual means of education.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 0 hour/week; Total annual contact hours: 30; Total units: 2 (Theory units: 2; Practical/Clinical units: 0).
7. Course administrator's name (mention all, if more than one name)	Asst. Lect. Mohammed Nihad Nafea Alsammaraie Email: mohammed.nihad@uoturath.edu.iq

Supplementary Course Description

The course provides a comprehensive introduction to medical terminology related to dentistry. It develops students' understanding of vocabulary used in medical texts, word formation and morphology, synonyms and related terms, and the use of terminology in appropriate clinical and academic contexts.

8. Course Objectives

Upon completion of the course, students should be able to:
1. Comprehend medical and dental terminology relevant to their field of study.
2. Build a functional vocabulary that supports professional communication and comprehension of medical texts.
3. Analyze the structure and formation of medical terms and apply them appropriately in related contexts.
4. Recognize synonyms and related terms to improve comprehension across different medical texts.
5. Use medical terminology appropriately in reports, research writing, and other academic and professional communication.

9. Teaching and Learning Strategies

Lectures, class discussion, whiteboard explanation, and multimedia presentations are used to introduce and reinforce terminology. Students develop critical thinking through worked examples, written homework, class discussion, short quizzes, and question-and-answer activities.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	1 Theoretical	Learning parts of medical terms composition	Prefixes & suffixes	Theoretical lecture	Daily, monthly and midterm exams
2	1 Theoretical	Learning English terms related to skin	Integumentary system	Theoretical lecture	Daily, monthly and midterm exams
3	1 Theoretical	Understanding English words related to muscles and movements	Muscular System	Theoretical lecture	Daily, monthly and midterm exams
4	1 Theoretical	Learning English terms related to respiratory system	Respiratory System	Theoretical lecture	Daily, monthly and midterm exams
5	1 Theoretical	Learning the English terms related to the digestive system	Digestive System	Theoretical lecture	Daily, monthly and midterm exams
6	1 Theoretical	The students learn English terms in relation to nervous system	Nervous System	Theoretical lecture	Daily, monthly and midterm exams
7	1 Theoretical	The students learn English words in relation cardiovascular system	Cardiovascular System	Theoretical lecture	Daily, monthly and midterm exams

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
8	1 Theoretical	The students learn how to identify parts of blood and lymph component using English words	Blood and Lymph	Theoretical lecture	Daily, monthly and midterm
9	1 Theoretical	The students learn English words related to immune system	Immune System	Theoretical lecture	exams
10	1 Theoretical	The students learn English terms related to glands and its secretions	Endocrine System	Theoretical lecture	Daily, monthly and midterm
11	1 Theoretical	The students learn English words to express five senses	Five Senses	Theoretical lecture	exams
12	1 Theoretical	The students learn English terms related to reproductive and urinary system	Genitourinary System	Theoretical lecture	Daily, monthly and midterm
13	1 Theoretical	The student learns English terms related to dentistry	Dental Terminology Part	Theoretical lecture	exams
14	1 Theoretical	The student learns English terms related to dentistry	Dental Terminology Par	Theoretical lecture	Daily, monthly and midterm
15	1 Theoretical	The student learns English terms related to dentistry	Dental terminology Part	Theoretical lecture	Daily, monthly and midterm exams
16	1 Theoretical	The student learns how to present their ideas as small talks	Small Talk	Theoretical lecture	Daily, monthly and midterm exams
17	1 Theoretical	The students learn not to fall into common mistakes	Common Mistakes	Theoretical lecture	Daily, monthly and midterm exams
18	1 Theoretical	The students learn passive voice roles	Passive Voice	Theoretical lecture	Daily, monthly and midterm exams
19	1 Theoretical	The students learn the difference between direct and indirect speech	Direct and Indirect Spee	Theoretical lecture	Daily, monthly and midterm exams
20	1 Theoretical	Students learn that words in English may have different synonyms	Synonyms	Theoretical lecture	Daily, monthly and midterm exams
21	1 Theoretical	Students learn how to use adjectives	Adjectives	Theoretical lecture	Daily, monthly and midterm exams
22	1 Theoretical	Students learn how to merge the Quotation into their writing	Integrating a Quotation an Essay	Theoretical lecture	Daily, monthly and midterm exams
23	1 Theoretical	Students learn how to use prepositions	Prepositions in Eng Grammar with Example	Theoretical lecture	Daily, monthly midterm exams
24	1 Theoretical	Students learn what does a certain phrase means	Idioms and Phrases	Theoretical lecture	Daily, monthly midterm exams
25	1 Theoretical	The students learn how to articulate an essay	Writing Assignments	Theoretical lecture	Daily, monthly midterm exams
26	1 Theoretical	The student learns how to write words in English without mistakes	Pronunciation rules	Theoretical lecture	Daily,
27	1 Theoretical	The students know the difference between past, present and future	Tenses	Theoretical lecture	Daily,
28	1 Theoretical	The students learn the synonyms of the words and their opposite	Synonyms and Antonym	Theoretical lecture	Daily,
29	1 Theoretical	Making the student understand how to paraphrase sentences	Paraphrasing	Theoretical lecture	Daily,
30	1 Theoretical	Teaching students how to express one's knowledge in English words	Essay Writing Skills	Theoretical lecture	Daily,

11. Course Evaluation

The detailed 100-point distribution is not separately stated in the 2025-2026 course specification. Course assessment is implemented in accordance with College and University examination regulations.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Medical Terminology for Health Care Professionals, 9th Edition, Jane Rice.

Main references (sources)	Dental Terminology, 3rd Edition, Charline M. Dofka.
Recommended books and references (scientific journals, reports...)	An Introductory English Grammar, 4th Edition, Norman C. Stageberg.
Electronic References, Websites	Medical- and dental-related electronic articles and educational resources as selected by the course instructor.

Course Description Form

TUD109 - Arabic (First Year)

1. Course Name:	Arabic
2. Course Code:	TUD109
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite theoretical learning.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 0 hour/week; Total annual contact hours: 60; Total units: 4 (Theory units: 4; Practical/Clinical units: 0).
7. Course administrator's name (mention all, if more than one name)	Not separately specified in the 2025-2026 course specification.

Supplementary Course Description

The Arabic language course develops formal Arabic reading, writing, and communication skills for academic and professional contexts, with attention to accurate general and medical terminology and clear communication with patients, colleagues, and the wider community.

8. Course Objectives

Upon completion of the Arabic language course, students should be able to:
1. Demonstrate effective reading and writing skills in formal Arabic for academic and professional contexts.
2. Communicate clearly in Arabic with patients, colleagues, and the wider community.
3. Understand and use accurate medical and general terminology in Arabic.
4. Demonstrate linguistic confidence and cultural awareness that support professional identity and ethical communication in dental practice.

9. Teaching and Learning Strategies

Not separately specified in the 2025-2026 course specification.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
-	-	Not specified in the 2025-2026 course syllabus.	Not separately specified in the 2025-2026 course specification.	Not separately specified in the 2025-2026 course specification.	Not separately specified in the 2025-2026 course specification.

11. Course Evaluation

The detailed 100-point distribution is not separately stated in the 2025-2026 course specification. Course assessment is implemented in accordance with College and University examination regulations.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Not separately specified in the 2025-2026 course specification.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD201 - Dental Materials (Second Year)

1. Course Name:	Dental Materials
2. Course Code:	TUD201
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Ahmed AbdulJaleel

Supplementary Course Description

The course provides an overview of the dental materials, enables students to know the name of the materials and their compositions and to have a total knowledge and skills to manipulate such materials with maximum advantage and to know the material's physical and mechanical properties. In addition, the course explains the significance and standardizations of manufacturing these dental materials.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of different dental materials.
2- Able to identify different types of dental materials and how to use it.
3- Apply theoretical knowledge in a practical setting during biology laboratory sessions, enhancing exchange knowledge.
4- Assess the correct methods of mixing and setting of different dental materials.
5- mix the dental material with different methods including different time intervals and different mixing speeds to see the differences in properties of setting materials.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of the materials used in dentistry.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance understanding.
2- Real dental materials and Simulations
Purpose: To provide visual and tactile learning experiences.
Approach: Use of dental materials study physical and mechanical properties of the materials.
3. Dental material laboratory:
Purpose: Enhance student ability to understand the behavior of the dental materials during mixing and setting.
Approach: Allows the student to manipulate the dental materials.
4. Critical thinking and problem solving:
5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (1) Lab.	1- Introduction and physical properties of dental material. - Introduction to dental materials Physical, mechanical, chemical and biological properties of dental materials.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (1) Lab.	2- Mechanical properties of dental material. -Gypsum product definition, requirement, types: -Gypsum bonded investment -Phosphate bonded investment -Ethyl silicate bonded (composition, properties and manipulation).	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (1) Lab.	3- Gypsum materials. -Investment materials factors affecting setting time, setting expansion, strength, storage and manipulation of gypsum products, hygroscopic expansion table with properties.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (1) Lab.	4- Gypsum materials. - Impression materials --- Definition. Ideal properties of impression materials. Classification of impression materials. Non elastic impression materials Impression plaster.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (1) Lab.	5- Impression materials. - Impression compound. - Zinc oxide -eugenol.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (1) Lab.	6- Impression materials. - Elastic impression material.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (1) Lab.	7- Impression material. - Elastomeric impression material.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (1) Lab.	8- Impression materials. -Filling materials Direct filling material Definition Factors causing loss of tooth substance. Requirement of an ideal filling material. Classification of filling material Anterior filling material 1-silicate cement disadvantages. 2-acrylic resin disadvantages.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
9	(1) theory (1) Lab.	9- Impression materials. - composite filling materials. Composition and structure. Types of composites according to methods of curing classification based on size of filler particles / Filler content Properties.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (1) Lab.	10- Waxes in dentistry. -Posterior filling materials Dental amalgam Classification of amalgam alloys. Manufacture of alloy powder Aging Spherical powder Composition Low copper High copper -1admix 2Unicomposition Low copper alloy. Available as Setting reaction High copper alloy Admix alloy powder Setting reaction Unicom position alloy Setting reaction.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (1) Lab.	11- Waxes in dentistry. - Properties of set amalgam -1Dimensional changes. Factor favoring contraction. -2strength. Factors affecting strength. -effect of trituration -effect of Hg content. -effect of condensation. -effect of porosity. -effect of rate of hardening. -Ceep Definition Effect of manipulative variable (for increase strength and low creep -Tarnish and corrosion. Definition Factors related to excess tarnish and corrosion. Technical consideration Manipulation for amalgam Dispenser Proportion of alloy to Hg Mixing time Condensation Shaping and finishing Mercury toxicity.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (1) Lab.	12- Polymers. - metallic denture base materials, Metal and metal alloy Definition of alloy, requirement of casting alloy, application of dental alloy, classification of metal, classification of dental alloy, gold foil (advantage, disadvantages), gold alloys (composition and properties).	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
13	(1) theory (1) Lab.	13- Polymers. - alternative of gold alloys, metal ceramic alloys (requirement, types), removable denture base alloys (requirements, types), co/cr alloy (application, composition, properties, advantages, disadvantages).	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (1) Lab.	14- Investment materials. - Titanium and Titanium alloys: Applications, properties, Ni/cr alloys, composition, indications, wrought stainless steel alloy.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (1) Lab.	15- Cement materials. -Nonmetallic denture base Polymers and polymerization Definition of polymer, co- polymer, cross-link polymer, polymerization, degree of polymerization. Factors which control structure and properties of polymer. Polymers used in dentistry Types of polymerizations.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (1) Lab.	16- Temporary filling. -Denture base resin Requirement for clinically acceptable denture base material Old materials used to constrict denture The material of choice to use as denture base material acrylic resin (polymethylmethacrylate) Why it is used nowadays Classification according to initiation reaction Composition of heat cure resin Methyl methacrylate monomer (properties) Polymer/monomer ratio.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (1) Lab.	17- Metal and metal alloy. - Properties of heat cure Composition of chemically activated resin Compared to heat activated resins Light activated resin Composition Processing errors 1-porosity 2-crazing 3-warpage Recent advance.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (1) Lab.	18- Metal and metal alloy. - Waxes Definition, Requirements, classification of wax according to origin & melting point, classification of wax according to uses, properties of dental waxes.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (1) Lab.	19- Metal and metal alloy. - Temporary filling Definition, indication, Requirements, Types.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
20	(1) theory (1) Lab.	20- Metal and metal alloy. - Cements Classification of dental cements, Definition, Requirements.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (1) Lab.	21- Filling materials. - Tissue conditioner Definition, Types, Requirements, indication. Soft liner Types: Requirements, indication, properties.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (1) Lab.	22- Filling materials. - Polishing and Abrasives Definition, factors affecting finishing and polishing, Types, and indication for each. -Denture cleaners: Types, Requirements.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (1) Lab.	23- Filling materials. - Laboratory work.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (1) Lab.	24- Filling materials. - Laboratory work.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (1) Lab.	25- Preventive materials. - Laboratory work.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (1) Lab.	26- Root canal filling materials (obturating materials). - Laboratory work.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (1) Lab.	27- Finishing and polishing materials. - Laboratory work.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (1) Lab.	28- Relining material. - Laboratory work.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (1) Lab.	29- Implant materials. - Laboratory work.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (1) Lab.	30- Maxillofacial materials. - Laboratory work.	Dental Material	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed

Student Grade	Grading system
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required book: Craig's Restorative Dental Materials the 14th Edition, 2018 by Ralph W. Craig, Jack L. Ferracane, John M. Powers. Electronic references or websites: Academy Dental Materials
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD202 - Prosthodontics (Second Year)

1. Course Name:	Prosthodontics
2. Course Code:	TUD202
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 4 hour/week; Total annual contact hours: 150; Total units: 6 (Theory units: 2; Practical/Clinical units: 4).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Dher Riyadh Email: - Dherriyadh@turath.edu.iq

Supplementary Course Description

The course provides an overview to an introduction about prosthodontic in general and clinical and laboratory steps of complete denture construction in particular, the student will know the impression technique and its significance in complete denture construction , in addition the course explain in detail jaw relation and vertical dimension , artificial teeth arrangement through both classroom and lab.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding intra oral landmark (maxilla and mandible and extraoral land mark and know its significance for complete denture
2- Able to identify different types of impression techniques in complete denture construction
3- Able to recognize the effect of support, stability, retention on complete denture and how its achieved
4- able to know the different jaw relation registration method
5- Able to arrange artificial teeth (anterior and posterior) in prosthodontic lab.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	1- Introduction □ Complete denture □ Objective of complete denture □ General consideration in complete denture construction □ Complete denture component parts	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) clinical	2- Anatomical landmarks □ Anatomical landmarks □ Maxillary arch anatomical landmarks □ Supporting structures □ Limiting structures □ Relief areas	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) clinical	3- Anatomical landmarks □ Anatomical landmarks □ Mandibular arch anatomical landmarks □ Supporting structures □ Limiting structures □ Relief areas	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) clinical	4- Complete Denture Impression □ Impression tray - Definition □ Parts of the impression tray □ Types of tray □ Stock tray – Definition □ Types of stock trays □ Factors effect in selection of stock tray	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) clinical	5- Complete Denture Impression □ Special tray □ Advantages of special tray □ Materials used for construction of special tray □ Types of special tray	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (2) clinical	6- Complete Denture Impression □ Dental impression - Definition □ Complete denture impression - Definition □ Objective of impression making □ Primary impression - Definition □ Materials used for making primary impression □ Primary cast - Definition □ Production of study cast □ Secondary impression - Definition □ Master cast- Definition □ Materials used for final impression □ Technique used for making final impression □ Boxing an impression and making the casts □ Advantages of boxing □ Common fault in impression making	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (2) clinical	7- Record Base □ Record base - Definition □ Requirements of record base □ Types of materials used in construction of record base	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
8	(1) theory (2) clinical	8- Occlusion Rims □ Occlusion rims - Definition □ Requirements of occlusion rim □ Materials used in construction of occlusion rim □ Measurements of maxillary occlusion	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	9-Anatomy And Physiology Of Temporomandibular Joint □ Temporomandibular joint (TMJ) – Definition □ Ligaments □ Muscles	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) clinical	10-Anatomy And Physiology Of Temporomandibular Joint □ Mandibular axes and mandibular movements □ Knowledge of mandibular movements □ Mandibular movements	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (2) clinical	11-Maxillomandibular relation □ Types of jaw relation □ Vertical jaw relation □ Rest position □ Inter – occlusal distance □ Importance of vertical dimension □ Increased vertical dimension □ Decreased vertical dimension	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	12- Methods Of Recording Vertical Relation □ Method of recording rest vertical dimension □ Method of recording occlusal vertical dimension □ Pre – extraction records □ Methods without pre – extraction record	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (2) clinical	13- Horizontal Jaw Relation □ Centric jaw relation □ Importance of centric jaw relation □ Methods of recording jaw relation □ Factors that complicates centric jaw relation □ Methods of recording	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (2) clinical	14-Dental Articulators (Classification & Digital computerized articulator programming) □ Dental articulator □ Definition □ Functions of articulator □ Requirements of articulator □ Types of articulator .	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	15-Face – Bow □ Face- bow □ Definition □ Parts of face – bow □ Types of face – bow □ Important of the face – bow .	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
16	(1) theory (2) clinical	16- Mounting □ Mounting □ Definition □ Preparation of articulator □ Preparation of the casts and mounting the upper cast on CL II articulator □ Mounting the lower cast □ Errors occurred during mounting	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) clinical	17- Selection Of Artificial Teeth □ Selection of anterior teeth □ The factors of shade selection □ Size selection a. Length b. Width □ Form selection □ Materials of anterior teeth □ Difference between acrylic and porcelain teeth	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) clinical	18- Selection Of Posterior Teeth □ Shade □ Bucco-lingual width □ Mesio-distal length □ Occluso-gingival height □ Occlusal form □ Advantages of casp form teeth □ Advantages of non- cusp form teeth	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) clinical	19- Arrangement Of Artificial Teeth □ Guideline of artificial teeth arrangement □ Arrangement ofanterior teeth □ Arrangement of upper anterior teeth	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	20- Arrangement Of Posterior Teeth □ Curve of Spee □ Compensatory curves □ Arrangement of lower posterior teeth □ Arrangement of upper posterior teeth □ Common errors in arrangement of teeth	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) clinical	21- Waxing And Carving □ Waxing □ Definition □ Requirements of waxing the polish surfaces □ The procedure of waxing □ Establishing the posterior palatal seal area □ Procedure for carving of posterior palatal seal area □ Advantages of posterior palatal seal □ Esthetic consideration in complete denture	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	22-Complete Denture Occlusion □ Occlusion □ Occlusion of complete denture □ Centric occlusion □ Centric relation .	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
23	(1) theory (2) clinical	23- Complete Denture Occlusion □ Eccentric occlusion □ Concepts of complete denture occlusion □ Try-in appointment	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	24-Processing Of The Denture (Flasking) □ Flasking of the denture □ Flasking techniques	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) clinical	25-Occlusal Correction □ Causes of errors in occlusion □ Selective grinding □ Correction of occlusal errors □ Disadvantages of intra – oral correction □ Advantages of extra – oral correction .	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	26- Finishing And Polishing Of Complete Denture □ Procedure of finishing □ Grinding and cutting instruments □ Polishing of complete denture □ Principles of polishing □ Procedures of polishing	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	27- Repair Of Complete Denture □ Types of material used in repair □ Causes of denture fracture □ Types of repair □ Laboratory procedure for repairing fractured denture base	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	28- Repair Of Complete Denture □ Replacement of broken or missing tooth □ Replacement of missing or lost part □ Requirement of repair	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (2) clinical	29- Relining And Rebasing □ Indication for relining or rebasing □ Relining □ Contraindications of relining and rebasing □ The impression techniques for relining and rebasing	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) clinical	30- Relining And Rebasing □ Laboratory procedures for relining □ Rebasing □ The chair – side reline technique	Prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Textbook of Complete Dentures the 7th Edition, 2019, by Arthur O. Rahn, John R. Ivanhoe, Kevin D. Plummer. Electronic references or websites: https://www.us.elsevierhealth.com/dentistry/prosthodontics Recommended books and references: Journals of prosthodontic
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD203 - Oral Histology and Embryology (Second Year)

1. Course Name:	Oral Histology and Embryology
2. Course Code:	TUD203
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Lec. Noor Natik Raheem. Email: - noordentist_2013@yahoo.com Asst. Lec. Sudad Haytham.

Supplementary Course Description

Enable the student the s to provide the diagnose and the treatment of various general diseases of the body
Teaching students to use optical microscopy and how to diagnose the pathological tissue
Teaching students to distinguish between the normal and pathological tissues
Enable the students to understand both clinical diagnoses and histopathological diagnosis
5-Enable students understand the knowledge of to different characteristics of each disease through clinical and histopathological tissue diagnosis.

8. Course Objectives

The oral histology course in dental college provides students with a comprehensive understanding of the microscopic structure and function of tissues in the oral cavity. Students learn to identify key oral tissues such as the epithelium, connective tissue, bone, teeth, salivary glands, and nerves, along with their physiological roles. They also explore the histological basis of oral diseases, linking their findings to clinical conditions like caries, periodontal disease, and oral cancer. Through hands-on experience with microscopy, students develop skills to examine tissue samples and interpret slides. The course also covers the embryological development of oral tissues and their relevance to dental practice. Ultimately, students apply their histological knowledge to enhance clinical decision-making and treatment planning in areas like restorative dentistry, orthodontics, and periodontology.

9. Teaching and Learning Strategies

Designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Presentation method
2. Reports and projects
3. Using PowerPoint lectures.
4. The use of smart screens and blackboards in presenting the scientific material
5. laboratories learning to acquire scientific skills
6. Scientific trip.
7. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(2) theory (2) clinical	1- Structure of the female reproductive system Structure of the ova Phases of the fertilization and implantation. Embryogenesis: first week, ovulation, fertilization and implantation.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(2) theory (2) clinical	2- Embryogenesis: 2nd week formation of the blastocyst and their component. 2nd week, Bilaminar germ layer.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar+ sildes.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(2) theory (2) clinical	3- Embryogenesis: 3rd week formation of the ectoderm endoderm and the mesoderm and their structures. 3rd week trilaminar germ layer: gastrulation and neurulation.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(2) theory (2) clinical	4- Development of head and neck (pharyngeal arch, pouch & cleft) The origin of each structure is involved. Development of head and neck (pharyngeal arch, pouch & cleft.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(2) theory (2) clinical	5- Development of face from some prominences and anomalies such as clefts and others. Development of face and anomalies.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(2) theory (2) clinical	6- Development of tongue (anterior two third and the posterior one third) innervation, vascularization and anomalies. Development of tongue and anomalies.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(2) theory (2) clinical	7- Development of palate (anterior and posterior) and anomalies such as cleft palate. Development of palate and anomalies.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar +slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(2) theory (2) clinical	8- Types of the slides, preparation methods and the steps of each method). Slide preparation.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(2) theory (2) clinical	9- Stages of the tooth development (physiological and the morphological) and developmental disturbances of teeth. Tooth development and developmental disturbances of teeth.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
10	(2) theory (2) clinical	10- The formation of the dentin, its types and its structure. Dentinogenetic and dentin structure.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(2) theory (2) clinical	11- The formation of the enamel its structure and the stages of the ameloblast. Amelogenesis, Enamel structures.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(2) theory (2) clinical	12- Anomalies of enamel and dentin and its causes. Clinical consideration for dentin and enamel.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(2) theory (2) clinical	13- Origin of the Dental Pulp, its function, structure and cells. Dental pulp.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(2) theory (2) clinical	14- The structure of the Cementum its cell, component and clinical consideration. Cementum and clinical consideration.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(2) theory (2) clinical	15- The development of the Root its layers on the formation of the cementum. Root formation& Cement genesis.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(2) theory (2) clinical	16- Origin, cells and function of the Periodontal ligaments. Periodontal ligament.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(2) theory (2) clinical	17- Types of the (Principles fiber of pdl and gingival fibers)and their position. Principles fiber of pdl and gingival fibers.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(2) theory (2) clinical	18- The types, structure of the Alveolar bone including the cells, fibers and function. Alveolar bone.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(2) theory (2) clinical	19- Remodeling of the Bone (formation and resorption) Where and when occur. Bone formation and resorption.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(2) theory (2) clinical	20- Proteins involve in mineralization of bone and dentin. Proteins involve in mineralization of bone and dentin.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(2) theory (2) clinical	21- The types, position of the Oral mucosa and its function. Oral mucosa and their types.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(2) theory (2) clinical	22- The position, structure of the Gingiva and dent-gingival junction. Gingiva and dentogingival junction.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
23	(2) theory (2) clinical	23- The Eruption proses, the factors affecting it and the Sequans of Eruption. Eruption of teeth.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(2) theory (2) clinical	24- Definition of Shedding The sequence and factors affect this proses Shedding of teeth.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(2) theory (2) clinical	25- Types of the Salivary gland, its position and types of secretion. Salivary glands.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(2) theory (2) clinical	26- proteins involved in saliva and its functions. Salivary proteins.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(2) theory (2) clinical	27- The structure ,boundaries and function of the TMJ. TM.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(2) theory (2) clinical	28- The structure, boundaries and function of the Maxillary sinus. Maxillary sinus.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(2) theory (2) clinical	29- Types of the stains used in slide preparation and its function. Histochemistry.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar + slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(2) theory (2) clinical	30- The aging proses and its effect on each tissue (soft or hard). Age changes of soft and hard tissues.	Oral Histology and Embryology	Theoretical lecture using PowerPoint presentation. Seminar +slides.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Orban's Oral Histology & Embryology, the 16th Edition, published in 2023 by G. S. Kumar. Main Reference:

	Ten Cates in Oral Histology development structures and function Antonio Nanci 9th Edition 2017, Elsevier Orban's Oral Histology and embryology Kummer. 14th Edition 2015, Elsevier. Electronic references or websites: Google scholar, Iraq Virtual Science Library (IVSL). Recommended books and references: Oral Anatomy, histology and embryology Berkowitz, Holand, Moxham. 5th edition.2018, Elsevier.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD204 - Biochemistry (Second Year)

1. Course Name:	Biochemistry
2. Course Code:	TUD204
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Hassan Ghani Email: - mohammed.jasim@turath.edu.iq

Supplementary Course Description

This course provides dental students with a fundamental understanding of biochemistry, focusing on the molecular basis of life and its relevance to oral health. Topics include the structure and function of biomolecules, metabolic pathways, and their regulation, as well as the biochemical processes involved in oral tissues, saliva composition, and dental caries. The course aims to integrate biochemical principles with clinical dentistry, preparing students for advanced studies in oral biology and patient care.

8. Course Objectives

Students' Learning Outcomes for Biochemistry:
Understand Concepts: Explain key biochemical processes and their relevance to dentistry.
Apply Knowledge: Link biochemistry to oral health and disease (e.g., dental caries, saliva composition).
Analyze Cases: Interpret biochemical abnormalities in dental clinical scenarios.
Practical Skills: Perform and understand basic biochemical lab techniques.
Integration: Connect biochemistry with other dental sciences like anatomy and physiology.
Problem Solving: Address oral health issues using biochemical principles.
Communication: Present biochemical concepts clearly and effectively.
Lifelong Learning: Stay updated on biochemistry applications in dentistry.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
Interactive Lectures: Use visual aids and relate biochemical concepts to clinical scenarios (e.g., enzyme roles in saliva).
Case-Based Learning (CBL): Discuss clinical cases related to oral biochemistry (e.g., pH changes in saliva).
Practical Learning: Conduct lab experiments, such as enzyme analysis or protein quantification.
Flipped Classroom: Provide pre-class materials and use lecture time for discussions and applications.
Integrated Learning: Link biochemistry topics with other subjects like anatomy and physiology.
Technology-Based Tools: Use interactive software and online quizzes for better engagement.
Group Discussions & Peer Teaching: Encourage students to present and discuss topics in groups.
Clinical Application: Focus on topics like fluoride biochemistry and dental caries.
9. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(2) theory (2) Lab	1- Enzymes: Definition ,Terminology , and Classification Lab safety	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(2) theory (2) Lab	2- Mechanism of enzyme action Sample collection-1	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(2) theory (2) Lab	3- Clinical significance of enzyme assays Sample collection-2	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(2) theory (2) Lab	4- Vitamins, definition, classification Spectrophotometer	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(2) theory (2) Lab	5- Digestion and absorption of carbohydrates, lipids ,and proteins Standard curve.	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(2) theory (2) Lab	6- Chemistry of carbohydrates Blood glucose+ HbA1c.	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(2) theory (2) Lab	7- Metabolism of Carbohydrates: part1 Total Protein.	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(2) theory (2) Lab	8- Metabolism of Carbohydrates :part 2 Albumin+ Globulin	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(2) theory (2) Lab	9- Carbohydrates metabolism regulation Troponin	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(2) theory (2) Lab	10- Chemistry of Proteins and amino acids Liver function test (Bilirubin)	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(2) theory (2) Lab	11- Metabolism of Proteins and amino acids Alkaline Phosphatase	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(2) theory (2) Lab	12- Metabolism of Protein and amino acid regulation Transaminases (ALT&AST)	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(2) theory (2) Lab	13- Metabolism of Protein and amino acid inherited disorder Lipid in blood (cholesterol & lipoprotein)	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(2) theory (2) Lab	14- Exam Triglyceride	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
15	(2) theory (2) Lab	15- Lipid :definition, classification Kidney function Test (urea)	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(2) theory (2) Lab	16- Metabolism of Lipid: oxidation of Fatty Acids Serum creatinine &creatinine clearness	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(2) theory (2) Lab	17- Biosynthesis of Fatty Acids General Urine Analysis-1	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(2) theory (2) Lab	18- Integration of metabolism of carbohydrates, lipid ,and Proteins General Urine Analysis-2	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(2) theory (2) Lab	19- Metabolism of Purines and pyrimidines Uric acid	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(2) theory (2) Lab	20- Metabolism of Purines and pyrimidines disorder Amylase in serum+ saliva	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(2) theory (2) Lab	21- Nucleic Acids Definition and Protein synthesis creatine phosphokinase.	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(2) theory (2) Lab	22- Hormone definition, classification lactate Dehydrogenase	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(2) theory (2) Lab	23- Hormone disorder serum calcium	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(2) theory (2) Lab	24- Acid-base balance serum phosphorus	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(2) theory (2) Lab	25-Trace elements disorder serum Na	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(2) theory (2) Lab	26- Salivary secretion(saliva), Pancreatic juice serum K .	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(2) theory (2) Lab	27- Electrolytes serum Iron .	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(2) theory (2) Lab	28- Liver Function Test Vitamin D .	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(2) theory (2) Lab	29- Kidney Function Test Vitamin C .	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(2) theory (2) Lab	30- Exam Acid phosphatase.	Biochemistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Lippincott's Illustrated Reviews: Biochemistry, by Denise R. Ferrier, 8th Edition (2022). Main Reference: "Textbook of Biochemistry with Clinical Correlations" "Harper's Illustrated Biochemistry"
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD205 - General Histology (Second Year)

1. Course Name:	General Histology
2. Course Code:	TUD205
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Taghreed Abdulraool Ali Email: - tagreed.abdulrasul@turath.edu.iq

Supplementary Course Description

General Histology is the study of the microscopic structure of cells, tissues, and organs. The course develops students' ability to examine prepared tissue sections using light microscopy and histological stains, recognize normal microscopic structures, and relate tissue organization to function in the human body.

8. Course Objectives

Upon completion of General Histology, students should be able to:
1. Describe the microscopic organization of cells, tissues, and major organ systems.
2. Identify epithelial, connective, muscular, nervous, and other major tissue types and relate their microscopic structure to function.
3. Recognize characteristic histological features in prepared sections using light microscopy and standard staining principles.
4. Correlate normal tissue structure with basic physiological and pathological concepts relevant to dental and medical sciences.
5. Apply basic laboratory and microscopy skills in the examination and interpretation of histological slides.

9. Teaching and Learning Strategies

Lectures provide foundational knowledge and an overview of histological concepts. Practical exercises, guided discussion, histology laboratory sessions, reports, seminars, critical-thinking activities, and technology-supported learning are used to reinforce identification of tissues and structure-function relationships.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(2) theory / (2) laboratory	1- Cells, Basic Tissue	Type of cells & types	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(2) theory / (2) laboratory	2- Epithelial Tissue	Type of epithelium	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(2) theory / (2) laboratory	3- Connective Tissue	Types of connective tissue	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
4	(2) theory / (2) laboratory	4-Respiratory System: conducting portion	conducting portion	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(2) theory / (2) laboratory	5- respiratory system	Respiratory portion	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz
6	(2) theory / (2) laboratory	6- Urinary System	kidney nephrons, collecting tubules and ducts	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(2) theory / (2) laboratory	7- Urinary System:	ureter, urinary bladder, and male and female urethra	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(2) theory / (2) laboratory	8- Integumentary System	Skin, epidermis, dermis	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(2) theory / (2) laboratory	9- Integumentary System	skin glands, hair, and nails	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(2) theory / (2) laboratory	10-Hemopoiesis	bone marrow	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(2) theory / (2) laboratory	11- Hemopoiesis:	blood cells	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(2) theory / (2) laboratory	12- Circulatory System	Type of Artery &vein	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(2) theory / (2) laboratory	13- Circulatory System	Type of capillaries	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(2) theory / (2) laboratory	14- Lymphoid System	Innate &adaptive immunity Antigen, antibody ,	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(2) theory / (2) laboratory	15- Lymphoid System	thymus ,lymphoid node and spleen	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(2) theory / (2) laboratory	16- Nervous System	Nerve tissue ,glial cells ,central nervous system	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(2) theory / (2) laboratory	17- Nervous System	Peripheral nervous system	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(2) theory / (2) laboratory	18- Endocrine System	Pituitary gland ,adrenal gland	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(2) theory / (2) laboratory	19- Endocrine System	Pancreatic islets , diffuse neuroendocrine system	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
20	(2) theory / (2) laboratory	20- Endocrine System	Thyroid ,parathyroid gland &pineal gland	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(2) theory / (2) laboratory	21- Digestive System	General structure of the digestive tract	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(2) theory / (2) laboratory	22- Digestive System	Oral cavity ,tongue , esophagus stomach , mucosa and other layers	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(2) theory / (2) laboratory	23-Digestive System	Small intestine , large intestine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(2) theory / (2) laboratory	24-Digestive System	accessory glands	Theoretical lecture using PowerPoint presentation. Seminar + practical work	Daily, monthly, semi- annul and final exams. Seminar and requirement Evaluation +Quiz
25	(2) theory / (2) laboratory	25- Male Reproductive System	interstitial Tissue Seminiferous Tubules Spermatogenesis sertoli cells intratesticular	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(2) theory / (2) laboratory	26- Male Reproductive System	ducts excretory genital ducts ,epididymis Vas deferens accessory glands ,seminal vesicles prostate gland bulbourethral glands	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(2) theory / (2) laboratory	27-female reproductive system	Ovaries ,uterine tube ,uterus	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(2) theory / (2) laboratory	28- female reproductive system	Placenta , cervix ,mammary gland	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(2) theory / (2) laboratory	29-Special Sense Organs: eye .	Photoreceptor system	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(2) theory / (2) laboratory	30-Special Sense Organs: ear	Vestibuloauditory system	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Color Atlas and Text of Histology, 8th Edition, published in 2023 by Leslie P. Gartner, PhD, and Lisa M.J. Lee, PhD.Gartner, Leslie P., and James L. Hiatt. 2. Junqueira, Luiz Carlos Uchí, and Anthony L. Mescher. Junqueira's basic histology. McGraw-Hill Medical, 2005. 3- Eroschenko, Victor P. DiFiore's atlas of histology with functional correlations. Lippincott Williams & Wilkins, 2008.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD206 - General Physiology (Second Year)

1. Course Name:	General Physiology
2. Course Code:	TUD206
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Sara Essami Email: -sara.kifah@uoturath.edu.iq

Supplementary Course Description

This course provides dental students with an understanding of human physiology, focusing on systems relevant to dental practice. Topics include cardiovascular, respiratory, digestive, and nervous systems, and their role in oral health. Emphasis is placed on how physiological principles affect dental conditions and treatment. The course integrates clinical scenarios to apply physiological knowledge in patient care. By the end, students will link physiological processes with dental diagnostics and procedures for improved clinical practice.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of general physiology principles relevant to dental work.
2- Able to identify different human body systems and their critical functions and importance.
3- Apply theoretical knowledge in a practical setting during physiology lab., enhancing their clinical competencies.
4- Effectively interpret blood test to identify normal range lab work, and to diagnose pathologies.
5- Basic knowledge to use microscope, read and interpret blood test.

9. Teaching and Learning Strategies

Designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of anatomical concepts.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance understanding.
2- 3D Models and Simulations
Purpose: To provide visual and tactile learning experiences.
Approach: Use of physical models and digital simulations to study comp physiology.
3. Physiology lab:
Purpose: Enhance student ability to evaluate student knowledge about human physiology and. Practice the theoretical techniques and acquire the necessary clinical skills to understand human physiology.
Approach: Allows the student to master general human physiology.
4-Critical thinking and problem solving:

3. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	1- Introduction (function of human body, cell components and function). Microscope.	General Physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) clinical	2- Body fluid (Type of body fluids, Intracellular and extracellular, Daily intake of water, Daily loss of body water, Constituents of extracellular and intracellular fluids, Major factors contribute to the movement of fluid, Specialized Fluids of the Body) Edema (Types of Edema, Causes of edema, Measurement of body fluid volume, Dehydration, Types of dehydration, Classification, Causes, Signs and Symptoms of Dehydrations). Collection of Blood Samples.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar +practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) clinical	3- Homeostasis and Transport across cell membrane (Diffusion (passive), Carrier-mediated transport (passive or active), Vesicular transport). Blood Smears.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) clinical	4- ORAL CAVITY and Salivary Glands (Functions of Mouth, Salivary Glands (Structure, Development, Major glands, Minor glands, Clinical correlations, Regulation of Salivary Secretion, Factors Influencing Salivary Flow and Composition) (Mastication, Deglutition, Bolus Formation for Swallowing, Digestion), (speech: Definition, Mechanism, Nervous Control, Applied Physiology). Functions of Saliva & Taste Sensation.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) clinical	5- Salivary functions and Regulation of Salivary Secretion (Composition of Saliva, Saliva Components, Properties of Saliva, Functions of Saliva, Effect of Drugs and Chemicals on Salivary Secretion, Maintenance of Tooth Integrity. The Diagnostic Applications of Saliva and forensic uses of saliva, Disadvantages/Limitations of Saliva). Stimulation and collection of salivary secretion.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (2) clinical	6- BLOOD (Composition of blood, Hematocrit, Plasma, Functions of blood), Red blood cells (Genesis of R.B.C, polycythemia, Anemia, Destruction of R.B.C.s). Separation of blood samples.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
7	(1) theory (2) clinical	7- White Blood Cells (Types of W.B.C., Genesis of the leukocytes, Life span of the W.B.C, Phagocytosis, Inflammation, Leukemia's, Leukopenia). Differential WBCs.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) clinical	8- Hemoglobin (Formation of Hemoglobin, Iron Metabolism, Hb Compounds, Destruction of Hb, The common causes of jaundice). Total Count of WBCs.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	9- Blood groups (Agglutination, Agglutinins, The Rh Group, Formation of Anti-Rh, agglutinins, Erythroblastosis Fetalis, Effect of the Mother's Antibodies on the Fetus, Transfusion Reactions resulting from mismatched Blood Types, Nature of Antibodies) . Total Count of RBCs .	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) clinical	10- Hemostasis and blood coagulation(Vascular Spasm, Formation of a Platelet Plug, Mechanism of the Platelet Plug, Mechanism of Blood Coagulation, Prevention of Clotting in the Normal Vascular System, Prevention of Blood Coagulation outside the Body, Blood Disease). Blood groups.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (2) clinical	11- Cardiovascular system: Blood vessels (Heart: Layers, Valves, Actions of heart, Blood Vessels, Division of circulation, Properties of Cardiac Muscle, Action Potential and Ionic Basis, Conductive system of Human Heart). Estimation of Hemoglobin.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	12- Cardiovascular system: Blood pressure (Cardiac Cycle, Heart Sounds, Cardiac Output, Heart Rate and Regulation, Arterial Blood Pressure and Regulation of ABP Venous Pressure and Capillary Pressure, Arterial Pulse and Venous Pulse, Regional Circulation). Bleeding and clotting time.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (2) clinical	13- Cardiovascular system (Electrocardiogram, Hemorrhage, Circulatory Shock and Heart Failure, Cardiovascular Adjustments during Exercise). Self-Monitoring of blood glucose test.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
14	(1) theory (2) clinical	14- Respiratory system (Types of Respiration, Stages of Respiration, Respiratory tract, Non respiratory functions of respiratory tract, Mechanics of Pulmonary Ventilation, Types of Respiratory pressures, Factors causing and preventing collapsing tendency of lungs). Measurement of blood pressure &pulse rate.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	15- Respiratory system: Lung volumes and capacities (Compliance, Variation in Compliance, The resistance and the work of breathing, Dead space, Lung volume and Lung capacity, Ventilation, Respiratory Protective Reflexes, Pulmonary function tests, Regulation of Respiration, The relationship between oral health and respiratory disease). . Effect of exercise on blood pressure and respiratory rate.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) clinical	16- Half-year Break. Mid Exam	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) clinical	17- SPECIAL SENSATION: Vision, Hearing, taste & smell (Structure of Eye, Visual Process and Field of Vision, Visual Pathway Pupillary Reflexes, Color Vision, and Errors of Refraction. Structure of Ear and Auditory Pathway, Mechanism of Hearing and Auditory Defects, Sensation of Taste and Smell). Physiology of vision test.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) clinical	18- Temperature of the Body (Normal body Temperatures, Physiological Variations of body temperature, Heat Balance, Heat gain or heat production in the body, Heat loss from the body, Insulator System of the Body, Blood flow to the skin from the body core provides heat transfer, Regulation of body temperature, Mechanisms to decrease or increase body temperature, Sympathetic "Chemical" Excitation of heat production). Physiology of hearing test.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
19	(1) theory (2) clinical	19- Urinary system (Parts of Renal system, The Kidney, Functions of kidneys, Components of kidney, Parenchyma of kidney, Nephron and Juxtaglomerular Apparatus, Renal corpuscle, Structure of renal corpuscle, Tubular portion of nephron, Collecting duct). Physiology of Smell sensation .	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	20-Urinary system: Urine formation (Mechanism of urine formation, Glomerular Filtration, Pressure determining filtration, Tubular Reabsorption, Tubular secretion Micturition, Nerve supply to urinary bladder and sphincters, Renal Function Tests, Relation between renal disease & oral health). Measurement of body temperature.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) clinical	21- Endocrine System (Introduction, Endocrine glands, Hormones, Nature of Hormones, Classification of hormones, Hormone Secretors, Hormonal action Hormone receptors, Synthesis and storage of hormones, Mechanism of hormonal function, Measurement of Hormone Concentrations in the Blood). Thyroid function (Body mass index).	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	22- Major Endocrine Glands(Oral manifestations of endocrine dysfunction, Control Systems Involving Hypothalamus and Pituitary glands, The pituitary gland, Thyroid gland, Pancreas gland, Adrenal glands). Thyroid function tests.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	23- Digestive system (The Functions of the digestive, Structural layers of digestive, Stomach, Secretions of the Stomach, Regulation of Stomach Secretion, Mixing of Stomach Contents, Stomach Emptying. Resuscitation &Artificial respiration.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	24- Digestive system (small intestine ,Secretions of the Small Intestine, Movement in the Small Intestine, Liver, Functions of the Liver, Pancreatic Secretions, Regulation of Pancreatic Secretion, Large Intestine, Movement in the Large Intestine Digestion, Absorption, and Transport). Resuscitation &Artificial respiration.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
25	(1) theory (2) clinical	25- Muscular system: Muscle structure (Types, Structure, Microscopic Structure, Muscle Physiology, Properties, Contraction and contractile elements, Tone, Electrical and Molecular Changes during Muscular Contraction). Physiology of Skeletal muscles.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	26- Muscular system: Tone, contraction (Molecular Changes During Muscular Contraction, Neuromuscular Junction-Neuromuscular Transmission and Blockers, Nutrition and Metabolism (Energy Requirements). Physiology of Skeletal muscles.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	27- Nervous System: Nerve impulse, synapses (Nervous System Division, Cranial nerves, Neuron and Neuroglia, Receptors, Nerve impulse, Synapse and Neurotransmitters). Physiology of Skeletal muscles.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	28- Nervous System (Reflex Activity, Somatosensory System and Somatomotor System, Physiology of Pain). Examination of reflexes (Motor Function).	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (2) clinical	29- Reproductive system: Aging & reproductive system (Male Reproductive System Female Reproductive System, Meiosis, Aging and Reproductive system. Seminars and examination review.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) clinical	30- Aviation and Deep physiology (Body Response in high altitudes, physiological Changes in the Sea deep). Nutrition and metabolism (daily energy requirement, obesity and fitness. Final Practical exam.	General physiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semi annul and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted

Student Grade	Grading system
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Essentials of Physiology for Dental Students, 1st Edition in 2010, by K. Sembulingam and Prema Sembulingam. Reference: Human dental physiology; 1st edition 1988 by D.B. Ferguson, hard book ISBN 978-0-7236-0725-0 Electronic references or websites: www.ajodo.org Recommended books and references: Text book of dental and oral anatomy, 1st edition 2013by B.S. Manguantha , ISBN: 9789350259955American Journal of Botany American Journal of Human Genetics B-Electronic references, Internet sites… https://bmcbiol.biomedcentral.com/
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD207 - General Anatomy (Second Year)

1. Course Name:	General Anatomy
2. Course Code:	TUD207
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Lecturer: Asst. Lec. Riyam Abbas. Email: - riyam.abbas@uoturath.edu.iq Asst. Lec. Ahmad Mudhaffar. ahmed.mudhafar@uoturath.edu.iq

Supplementary Course Description

The course provides an overview of human anatomy, enables students to effectively know the actual site and relation of vital body structure, and equips students with the knowledge and skills to deal with clinical application and complication regarding to anatomical background.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of anatomy of head and neck
2- Able to identify different similar vital structure and ability to effectively distinguishing between them
3- Apply theoretical knowledge in a practical setting during human anatomy labs, enhancing their clinical competencies.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) lab	1- Scalp Layers of the scalp Muscles of the scalp Sensory Nerve Supply of the Scalp Arterial Supply of the Scalp Venous Drainage of the Scalp Lymph Drainage of the Scalp Clinical Notes.	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) lab	2- Scalp Layers of the scalp Muscles of the scalp Sensory Nerve Supply of the Scalp Arterial Supply of the Scalp Venous Drainage of the Scalp Lymph Drainage of the Scalp Clinical Notes.	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) lab	3- The orbital region Eyelids Movements of the Eyelids Lacrimal Apparatus Openings into the Orbital Cavity Nerves of the Orbit Blood and Lymph Vessels of the Orbit Structure of the Eye Clinical Notes).	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) lab	4- The orbital region Eyelids Movements of the Eyelids Lacrimal Apparatus Openings into the Orbital Cavity Nerves of the Orbit Blood and Lymph Vessels of the Orbit Structure of the Eye Clinical Notes).	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) lab	5- The Nasal region The Nose External Nose Nerve Supply of the External Nose Blood Supply and Venous Drainage of the External Nose Nasal Cavity Mucous Membrane of the Nasal Cavity Nerve Supply of the Nasal Cavity Blood Supply to the Nasal Cavity Venous Drainage of the Nasal Cavity Lymph Drainage of the Nasal Cavity The Paranasal Sinuses Drainage of Mucus and Functions of Paranasal Sinuses Clinical Notes	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
6	(1) theory (2) lab	6- Mandibular nerve Introduction Branches of the Mandibular Nerve Otic Ganglion Clinical Notes	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
7	(1) theory (2) lab	7. Face Skin of the Face Muscles of the Face (Muscles of Facial Expression) Sensory Nerves of the Face Arterial Supply of the Face venous driange of the Face venous driange of the Face Lymphatic driange of the face Facial nerve	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) lab	8. Face Skin of the Face Muscles of the Face (Muscles of Facial Expression) Sensory Nerves of the Face Arterial Supply of the Face venous driange of the Face venous driange of the Face Lymphatic driange of the face Facial nerve	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	theory (2) lab	9. Oral cavity The Lips The oral Cavity vestibule and Proper Sensory innervation of the Mouth Hard Palate & Soft palate Muscles of the Soft Palate Palatoglossal Arch & Palatopharyngeal Arch	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
10	theory (2) lab	10. Oral cavity The Lips The oral Cavity vestibule and Proper Sensory innervation of the Mouth Hard Palate & Soft palate Muscles of the Soft Palate Palatoglossal Arch & Palatopharyngeal Arch	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	theory (2)lab	11- Tongue Mucous Membrane of the Tongue Muscles of the Tongue Movements of the Tongue	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	theory (2) lab	12- Temporal region The temporal fossa anatomy The infratemporal fossa Communications Muscles of mastication .	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	theory (2) lab	13- Parotid gland Parotid Region (Boundaries) Parotid Gland Parotid Duct Innervation of Parotid Gland and Related Structures Arterial Supply Venous Drainage Lymph Drainage The Buccal Pad of Fat Clinical Notes	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	theory (2) lab	14- Parotid gland Parotid Region (Boundaries) Parotid Gland Parotid Duct Innervation of Parotid Gland and Related Structures Arterial Supply Venous Drainage Lymph Drainage The Buccal Pad of Fat Clinical Notes	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	theory (2) lab	15.The Pterygopalatine fossa Boundaries, Communications and openings Maxillary nerve Branches from the pterygopalatine ganglion THE PTERYGOPALATINE GANGLION THE VEINS OF THE PTERYGOPALATINE FOSSA	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) lab	16- Temporomandibular joint Introduction The Articular Disk Retrodiscal Tissue Capsule Synovial Membrane Ligaments Nerve Supply Vascular Supply Movements Important Relations of the Temporomandibular Joint Clinical Notes	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) lab	17- Temporomandibular joint Introduction The Articular Disk Retrodiscal Tissue Capsule Synovial Membrane Ligaments Nerve Supply Vascular Supply Movements Important Relations of the Temporomandibular Joint Clinical Notes	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) lab	18.The neck Overview Skin of the Neck Fasciae of the Neck Superficial Cervical Fascia Deep Cervical Fascia Cervical Ligaments Muscles of the Neck Cervical Plexus Bones of Neck Blood Supply Key Neck Muscles	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) lab	19. The neck Overview Skin of the Neck Fasciae of the Neck Superficial Cervical Fascia Deep Cervical Fascia Cervical Ligaments Muscles of the Neck Cervical Plexus Bones of Neck Blood Supply Key Neck Muscles	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
20	(1) theory (2) lab	20. Triangles of the neck ANTERIOR TRIANGLE SUBMENTAL TRIANGLE SUBMANDIBULAR TRIANGLE CAROTID TRIANGLE MUSCULAR TRIANGLE Posterior Triangle Thyroid Gland blood supply & venous drainage nerve supply	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) lab	21.Triangles of the neck ANTERIOR TRIANGLE SUBMENTAL TRIANGLE SUBMANDIBULAR TRIANGLE CAROTID TRIANGLE MUSCULAR TRIANGLE Posterior Triangle Thyroid Gland blood supply & venous drainage nerve supply	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) lab	22- Submandibular region MUSCLES OF THE SUBMANDIBULAR REGION The submandibular gland Sublingual Gland .	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) lab	23- Root of the neck Muscles of the Root of the Neck The Thoracic Duct Main Nerves of the Neck Cervical Plexus & Brachial Plexus Lymph Drainage of the Head and Neck Veins of the Head and Neck .	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) lab	24- Root of the neck Muscles of the Root of the Neck The Thoracic Duct Main Nerves of the Neck Cervical Plexus & Brachial Plexus Lymph Drainage of the Head and Neck Veins of the Head and Neck .	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) lab	25- Arteries of the neck Common Carotid Artery Carotid Sinus Carotid Body External Carotid Artery Internal Carotid Artery Subclavian Arteries (3 parts) Circle of Willis.	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) lab	26- Arteries of the neck Common Carotid Artery Carotid Sinus Carotid Body External Carotid Artery Internal Carotid Artery Subclavian Arteries (3 parts) Circle of Willis .	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) lab	27. Brain Nervous System Gross Anatomy of the Brain Parts of the Brain Ventricular System of the Brain The Venous Blood Sinuses (Dural Sinuses) Blood Supply of the Brain Cranial Meninges Dural Nerve Supply Dural Arterial Supply Dural Venous Drainage Clinical Focus	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) lab	28 Cranial nerves Introduction Functional Components Summary of cranial nerves.	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (2) lab	29.Pharynx Muscles of the Pharynx Pharynx divisions Palatine Tonsils Waldeyer's Ring of Lymphoid Tissue	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
30	(1) theory (2) lab	30- Larynx Cartilages of the Larynx Membranes and Ligaments of the Larynx Inlet of the Larynx Laryngeal Folds Muscles of the Larynx Nerve & blood Supply of the Larynx	Human anatomy	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required books: - Snell's Clinical Anatomy - 11th Edition (2022). Netter's Head and Neck Anatomy - 2nd Edition (2019). Recommended books and references: Journals Oral Surgery, Oral Medicine.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD208 - Baath Crimes (Second Year)

1. Course Name:	Baath Crimes
2. Course Code:	TUD208
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	On-campus attendance; laboratory, simulation or clinical attendance as applicable.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 0 hour/week; Total annual contact hours: 30; Total units: 2 (Theory units: 2; Practical/Clinical units: 0).
7. Course administrator's name (mention all, if more than one name)	Not separately specified in the 2025-2026 course specification.

Supplementary Course Description

A separate detailed course description is not stated in the 2025-2026 course specification.

8. Course Objectives

Course-specific learning outcomes are not separately stated in the 2025-2026 course specification.

9. Teaching and Learning Strategies

Not separately specified in the 2025-2026 course specification.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
-	-	Not specified in the 2025-2026 course syllabus.	Not separately specified in the 2025-2026 course specification.	Not separately specified in the 2025-2026 course specification.	Not separately specified in the 2025-2026 course specification.

11. Course Evaluation

The detailed 100-point distribution is not separately stated in the 2025-2026 course specification. Course assessment is implemented in accordance with College and University examination regulations.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Not separately specified in the 2025-2026 course specification.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD209 - Biosafety and Biosecurity (Second Year)

1. Course Name:	Biosafety and Biosecurity
2. Course Code:	TUD209
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 1 hour/week; Total annual contact hours: 60; Total units: 3 (Theory units: 2; Practical/Clinical units: 1).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Mohammed Jasim Al-Obaidi Email: - mohammed.jasim@turath.edu.iq

Supplementary Course Description

The Biosafety course at the College of Dentistry, teaches students the basics of infection control, safety protocols, and the use of personal protective equipment (PPE) in dental practice. It covers sterilization, waste management, and safe handling of biohazardous materials. Students will learn how to prevent cross-contamination and ensure patient and staff safety. The course includes both theoretical lessons and practical skills. By the end, students will be prepared to follow proper biosafety measures in a dental environment.

8. Course Objectives

1-Understand basic biosafety principles in dental practice.
2-Apply infection control measures to prevent cross-contamination.
3-Use and dispose of personal protective equipment (PPE) correctly.
4-Perform sterilization and disinfection of dental tools and surfaces.
5-Safely manage biohazardous waste and follow health regulations to maintain a safe clinical environment.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
Infection Control Protocols: Implementing standard precautions and transmission-based precautions to prevent cross-contamination.
Proper Use of PPE: Training on the correct selection, use, and disposal of personal protective equipment (gloves, masks, gowns, etc.) to safeguard against infectious agents.
Sterilization and Disinfection Practices: Adopting effective sterilization techniques for dental instruments and disinfection practices for the clinic environment.
Safe Waste Management: Proper handling, storage, and disposal of biohazardous materials and dental waste to minimize risk.
Compliance with Regulations: Ensuring adherence to national and international biosafety standards and guidelines to maintain a safe clinical environment.
7. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (1) lab	1- introduction to biosafety & biosecurity And Laboratory safety (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (1) lab	2- universal safety precautions And Difintion & concept of biosecurity & biosafety (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (1) lab	3- biosafety levels And universal safety precautions (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (1) lab	4- biorisk & biohazard And Biosafety barrier in lab. (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (1) lab	5- biorisk management system And Biosafety levels (1-2) (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (1) lab	6- mitigation control measurement And Biosafety levels (3-4-5) (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (1) lab	7- type of biological waste And Biosafety levels (3-4-5) (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (1) lab	8- transportation of biological material And Biological agent (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (1) lab	9- the accident response And Biological safety cabinet (BSC) (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (1) lab	10- overview of biological safety and security equipment And Biorisk and biohazard (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (1) lab	11- introduction to biosecurity And Hazard (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (1) lab	12- biosafety practice part biosafety rules simulation 3D And Containment level (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (1) lab	13- safety for support staff And Biorisk management system (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (1) lab	14- disinfection & sterilization And Biorisk management system (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (1) lab	15- biosafety training And mitigation control measurement (LAB)	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
16	(1) lab	Type of biological waste	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) lab	Transportation of biological material	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1)lab	The accidental response	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1)lab	overview of biological safety and security equipment	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1)lab	introduction to biosecurity	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1)lab	Vulnerability assessment	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1)lab	Biosafety practice part	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1)lab	Biosafety rules simulation 3D	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1)lab	Decontamination and biological waste disposal	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1)lab	Safety for support staff	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1)lab	disinfection & sterilization	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1)lab	Hazardous chemical	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1)lab	biosafety training	Biosafety	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed

Student Grade	Grading system
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. Books Required reading: Biological Safety: Principles and Practices, 5th Edition 2017, by Dawn P. Wooley and Karen B. Byers. 2-Electronic references, Internet sites… WHO CDC
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD301 - Microbiology (Third Year)

1. Course Name:	Microbiology
2. Course Code:	TUD301
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	15-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Lec. Saed Araak Turki. Email: - mohammed.jasim@turath.edu.iq

Supplementary Course Description

The Microbiology course at the College of Dentistry introduces students to the study of microorganisms, focusing on their role in oral health and dental diseases. Topics include bacteria, viruses, fungi, and oral pathogens responsible for conditions like cavities and gum disease. Students will learn about the immune system, infection transmission, and antimicrobial treatments. The course also emphasizes infection control practices in dental settings. By the end, students will understand how to apply microbiology principles to maintain a safe and effective dental practice.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Understand the basic principles of microbiology and its relevance to dental practice.
2- Identify common oral pathogens and their role in dental diseases like caries and periodontal disease.
3- Describe the mechanisms of infection, immunity, and disease transmission in the oral cavity.
4- Apply infection control practices to prevent microbial contamination in dental settings.
5- Recognize the use and limitations of antimicrobial agents in treating oral infections and managing antibiotic resistance.

9. Teaching and Learning Strategies

Designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1-The course uses interactive lectures to introduce key microbiology concepts. Practical lab sessions help students apply techniques for identifying microorganisms. Case studies are discussed to connect microbiology with real-world dental issues. Students engage in group discussions to enhance problem-solving and collaboration. Regular assessments ensure understanding and provide feedback for improvement.
2-Critical thinking and problem solving:

3. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(2) theory (2) lab	1- Morphology, Ultra structures, physiology and metabolism of microorganisms And Orientation to the Microbiology laboratory (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(2) theory (2) lab	2-Microbial growth, growth curve And The microscope (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(2) theory (2) lab	3-Antibiotic and chemotherapy And Sterilisation and disinfection (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(2) theory (2) lab	4-Sterilization and Disinfection And Bacterial growth (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(2) theory (2) lab	5-Introduction to general immunology and oral immunology And Types of culture media (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(2) theory (2) lab	6-Cells and organs of the immune system And Sampling and transport of test material (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(2) theory (2) lab	7-Oral and mucosal immunity And Laboratory cultivation of microorganisms (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(2) theory (2) lab	8- Hypersensitivity reactions And Bacterial identification (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(2) theory (2) lab	9-Host-parasite relationship & Nosocomial infection And Microscopical examination (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(2) theory (2) lab	10- Streptococci And Staining (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(2) theory (2) lab	11-Staphylococci And Biochemical tests(part1) (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(2) theory (2) lab	12-G- negative diplococcic And Biochemical tests(part2) (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(2) theory (2) lab	13- Lactobacilli, Actinomyces and Corynebacterium diphtheriae & Diphtheroids And Biochemical tests(part3) (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
14	(2) theory (2) lab	14-Bacillus: And Antibiotic sensitivity test(part 1). (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(2) theory (2) lab	15-Clostridium And Antibiotic sensitivity test(part 2). (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(2) theory (2) lab	16- Enterobacteriaceae And Serological tests (antigen and antibody detection tests) (part 1). (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(2) theory (2) lab	17-Enterobacter, Klebsiella, proteus, Yersinia And Serological tests (antigen and antibody detection tests) (part 2). (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(2) theory (2) lab	18-Mycobacteruim And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(2) theory (2) lab	19-Brucella, Haemophilus, Vibirio And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(2) theory (2) lab	20- And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(2) theory (2) lab	And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(2) theory (2) lab	22- Treponema and oral Treponema And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(2) theory (2) lab	23- And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(2) theory (2) lab	24- And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(2) theory (2) lab	25-Microbiology of dental caries And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(2) theory (2) lab	26-Microbial colonization And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(2) theory (2) lab	27-Microbiology of periodontal disease and Endodontics And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(2) theory (2) lab	28- virology And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(2) theory (2) lab	29- viral replication And (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
30	(2) theory (2) lab	30- Oral mycology and Oral parasitology and (LAB)	Microbiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Main Reference: Oral Microbiology 6th edition by Philips Marsh A- Recommended books and references (scientific journals, reports…). Marsh and Martin's American Journal of Botany American Journal of Human Genetics B-Electronic references, Electronic references or websites: https://bmcbiol.biomedcentral.com/ Extra-references or websites: The Selfish Gene" by Richard Dawkins. "The Diversity of Life" by Edward O. "The Immortal Life of Henrietta Lacks" by Rebecca Skloot. "The Origin of Species" by Charles Darwin. "The Sixth Extinction" by Elizabeth Kolbert. "The Hidden Life of Trees" by Peter Wohlleben. 1. Books Required reading: The Selfish Gene" by Richard Dawkins. ... "The Diversity of Life" by Edward O. ... "The Immortal Life of Henrietta Lacks" by Rebecca Skloot. ... "The Origin of Species" by Charles Darwin. ... "The Sixth Extinction" by Elizabeth Kolbert. ... "The Hidden Life of Trees" by Peter Wohlleben
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD302 - Pharmacology (Third Year)

1. Course Name:	Pharmacology
2. Course Code:	TUD302
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Lec. Dr. Huda MH. Ali Email: - huda.mhasan@uoturath.edu.iq

Supplementary Course Description

The course provides an overview of pharmacology, enables students to knowing different drugs, their uses, interactions, side effects and toxicity including drugs used for dental diseases to choose the suitable more effective treatment. This occurs in both class and laboratory.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
Students will demonstrate an initial understanding of pharmacology principles specially that are related to dental disease.
Able to distinguish different types of drugs and the use of the appropriate one for certain dental disease.
Apply theoretical knowledge in a practical setting to enhance them in their clinical applications.
The safe and the correct application of pharmacological techniques in laboratory.

9. Teaching and Learning Strategies

Designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of chemicals and human body enzymes concepts.
Approach: Use of multimedia presentations, detailed diagrams and figures.
2. Pharmacology Lab.:
Purpose: Enhance student ability to evaluate the drug effect(s) and practice the theoretical techniques.
Approach: Allows the student to do the laboratory experiments.
3. Increasing the students' knowledge about drugs by presenting and discussing different reports and seminars on the screen.
4- Critical thinking and problem solving:

3. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(2) theory (2) Lab.	1- Pharmacology: General concepts. Introduction and animal (e.g. rabbit) handling	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
2	(2) theory (2) Lab.	2- Pharmacokinetics and Pharmacodynamics. Routes of drug administration part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
3	(2) theory (2) Lab.	3- ANS from pharmacological perspective (including cholinergic agonist and antagonists). Routes of drug administration part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
4	(2) theory (2) Lab.	4- Adrenergic agonists. Clinical parameters in drug pharmacokinetics part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
5	(1) theory (2) Lab.	5- Adrenergic antagonists. Routes of drug administration part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
6	(2) theory (2) Lab.	6- Antihypertensive drugs. Demonstration of Common dosage forms used in clinical practice part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
7	(2) theory (2) Lab.	7- Management of angina and heart failure. Demonstration of Common dosage forms used in clinical practice part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
8	(2) theory (2) Lab.	8- Management of arrhythmia. Cholinergic agonists and antagonists (physostigmine Vs curare).	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
9	(2) theory (2) Lab.	9- Anticoagulants, antiplatelet and antihyperlipidemic drugs. Effects of drugs on human blood pressure part 1 beta-blockers.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
10	(1) theory (2) Lab.	10- Local hemostatic agents in dentistry. Effects of drugs on human blood pressure part 2 nitrates effect on human volunteers..	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
11	(2) theory (2) Lab.	11- Introduction the pharmacology of CNS drugs, sedative, hypnotics and anti-seizure drugs. Effects of drugs on human arterial blood pressure part 3.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
12	(2) theory (2) Lab.	12- Antipsychotic and antidepressant drugs. The effects of drugs and light on human eyes part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
13	(2) theory (2) Lab.	13- Local and general anaesthetics. The effects of drugs and light on human eyes part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
14	(2) theory (2) Lab.	14- Drug of abuse and opioid analgesics. Effects of parasympathomimetic drugs on glandular secretions.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
15	(2) theory (2) Lab.	15- Management of D.M. The response of human skin to antihistamine and adrenaline part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
16	(2) theory (2) Lab.	16- Drugs affecting GIT. The response of human skin to antihistamine and adrenaline part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
17	(3) theory (2) Lab.	17- Drugs acting on respiratory system (antihistamines and corticosteroids). Evaluation of analgesics.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
18	(2) theory (2) Lab.	18- NSAIDs part 1 Evaluation of analgesics (opioid).	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
19	(2) theory (2) Lab.	19- NSAIDs part 2 and steroids in dentistry. Evaluation of anti-inflammatory drugs part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
20	(2) theory (2) Lab.	20- Chemotherapeutic drugs (principles of antimicrobial therapy). Evaluation of anti-inflammatory drugs part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
21	(2) theory (2) Lab.	21- Cell wall inhibitors part 1. Local anaesthesia.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
22	(2) theory (2) Lab.	22- Cell wall inhibitors part 2. General anaesthesia part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
23	(2) theory (2) Lab.	23- Protein synthesis inhibitors. General anaesthesia part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
24	(3) theory (2) Lab.	24- Quinolones, folic acid antagonists and antimycobacterial. Prescription writing part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
25	(2) theory (2) Lab.	25-Antifangal, antiviral and antiprotozoal drugs. Prescription writing part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
26	(2) theory (2) Lab.	26- Sex hormones and contraceptive. Prescription writing part 3.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
27	(2) theory (2) Lab.	27- Thyroid hormones and anti-thyroid drugs. Oral conditions and their treatment.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
28	(1) theory (2) Lab.	28- Anticancer drugs. Orodental preparation part 1.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
29	(1) theory (2) Lab.	29- Dental pharmacology: Drugs and chemicals used in dental clinic. Orodental preparation part 2.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.
30	(2) theory (2) Lab.	30- Anti-caries and drugs used in prevention of dental plaques. Dental health and endocarditis prevention.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
31	(2) theory (2) Lab.	31- Essential emergency drugs in dental clinic. Final practical exam.	Pharmacology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and homework evaluation + Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15%	10%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Lippincott Illustrated reviews Pharmacology Book 8th Edition 2022 By Karen Whalen Main Reference: Principles and Fundamentals of Pharmacology. Electronic references or websites: ● https://pharmacology.org/articles Recommended books and references: Books and Journals of Pharmacology.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD303 - Community Dentistry (Third Year)

1. Course Name:	Community Dentistry
2. Course Code:	TUD303
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	15-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Mais Al-ani Email: - mais.zuber@turath.edu.iq

Supplementary Course Description

Provides the knowledge about public health and dental public health, studying epidemiology and statistics, application of indices, and how to diagnose the dental caries and periodontal disease. Studying the benefits, uses, application of fluoride. The benefits of school program and forensic dentistry, and how to be applied infection controls strategies in clinics.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1. Diagnostic Skills: Develop proficiency in diagnosing oral diseases and conditions, including dental caries, periodontal disease, and oral cancer.
2. infection control: how to apply the infection control and how to manage protective equipment in dental clinic.
3. apply teeth numbering system.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of biological concepts.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance understanding.
2. Laboratory work:
Purpose: Enhance student ability to manipulate dental chairs and apply infection control.
Approach: Allows the student to diagnose dental caries and periodontal disease.
4. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	Dental public health -Public health definition. -Dental Public health definition. - Community Dentistry. - Dental public health practitioners. - Public health impact of dental disease. - Tools of dental public health. 1-Epidemiology. 2- Biostatistics. 3-Social sciences. 4- Principles of administration. 5-Preventive dentistry.	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) clinical	-Dental public care - Steps in planning dental care for the patient - Steps in planning dental care for the community - Similarities between personal and community health care: - Differences between private dental practice and public health dentistry	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) clinical	Epidemiology - Objectives of epidemiology. - Components of epidemiological study. - Essential steps in an epidemiological study. - Hypothesis. - Population at risk. - Morbidity. - Measurements of disease frequency. Epidemiological approach. - Measurement tools in epidemiology.	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) clinical	Epidemiological studies Types of Epidemiological studies: 1-Observational studies Types of observational studies - Descriptive studies. -Analytical studies. Case control studies Cohort studies Ecological studies	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) clinical	2-Experimental studies -Intervention Types of experimental studies	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (2) clinical	Epidemiology of dental caries - Definition of dental caries - Epidemiology -Etiological factors of dental caries -Types of dental caries according to their anatomical (location) site. - Factors affecting epidemiology of dental caries	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (2) clinical	Epidemiology of Periodontal Disease -Periodontal Diseases definition -Structure of the periodontal tissues -Epidemiology -Etiology of periodontal disease	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
8	(1) theory (2) clinical	epidemiology of Oral Cancer - Types of cancers - Etiology of oral cancer - Constituents of tobacco smoke - Potentially malignant lesions - Levels of prevention for oral cancer - Rehabilitation after Oral Cancer	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	Dental indices - Index - Uses of dental index - Classification of indices	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) clinical	indices used for assessment of dental caries -DMF index -Principles in recording DMF index - Calculation of DMFT/DMFS - Dental caries severity index - dmf index	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (2) clinical	Indices used for assessment of periodontal disease - Oral Hygiene Indices: - Gingival inflammation indices - Periodontal indices	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	Dental fluorosis Indices for assessment of dental fluorosis	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (2) clinical	Biostatistics - Data - Types of data - Methods of Data Collection -Sampling Technique -Types of sample design	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (2) clinical	Data presentation - Methods of data presentation -The tabulation of data The graphical representation of data	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	measures of central tendency & dispersion -Measures of central tendency -Measures of dispersion	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) clinical	Fluoridation as a public health measure - History: - Sources of Fluoride -Water fluoridation -Types of fluoride	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) clinical	Fluoridation Mechanism and Effects Mechanism of action -Anti-caries effects of fluoride. -Metabolism of fluoride - -Dental Fluorosis -Side effects of fluoride	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
18	(1) theory (2) clinical	occupational hazards in dentistry - Major occupational hazards -Biological health hazards. -Physical hazards -Chemical hazards -Musculoskeletal disorders and diseases of the peripheral nervous system -Hearing loss -Radiation exposure -Stress -Legal hazards -Other risks	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) clinical	environment and health - Environment -Physical environment: -Biological environment: -Psychological environment - Environmental indicators.	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	Effects of air pollution on health -Prevention and control of air pollution - Effects of radiation -Noise pollution	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) clinical	School Dental Health Program - Purpose of School Health Program - Guidelines for an ideal school dental program - School dental survey - phases in school oral health program	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	Treatment need and demand - Need - categories of need - Demand - Factors affecting dental demands	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	- Dental manpower - Manpower definition - Dental health manpower planning -Steps in dental health manpower planning	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	Ethics in dentistry -Definition of ethics - Dentistry as a profession - Ethical principles	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) clinical	Oral health care for special populations - Elderly people: - The main oral effects of aging - Pregnant women - Special Care Dentistry - Patients with special health care needs	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	Forensic dentistry -Introduction -Application of forensic dentistry. -Bit marks -Person identification . -Dental identification.	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	Dental auxiliary personal -Introduction. - Dental auxiliary classification. *Non operatory auxiliary. * Operatory auxiliary. -Four handed relationship.	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
28	(1) theory (2) clinical	Primary health care - Introduction. -Elements (components) of Primary health care. -Principles of Primary health care. - Primary dental health care. -Community dental health services	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (2) clinical	Infection control - Introduction. -Concept of disease transmission. -The acquisition means of pathogens. -Transmission of infectious diseases. -Control of infectious diseases. -Personal barrier techniques. -Instrument processing(sterilization).	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) clinical	Dental health education - Introduction. -Aims of health education. -Objective of health education. - Objective of dental health education. -Principle of health education. -Planning a health education programs.	community dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Essentials of Public Health Dentistry 8th edition by Soben Peter
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD304 - Conservative Dentistry (Third Year)

1. Course Name:	Conservative Dentistry
2. Course Code:	TUD304
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning combining theoretical instruction with laboratory and simulation training.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Prof. Luma Baban Email: luma.baban@turath.edu.iq

Supplementary Course Description

This preclinical Conservative Dentistry course introduces the principles of cavity preparation and restorative materials, including amalgam, cement bases, and composite materials. Students receive practical training on artificial teeth using simulation laboratories and phantom heads to develop the skills required for subsequent patient care.

8. Course Objectives

Upon completion of the course, students should be able to:
1. Explain the fundamental principles of conservative cavity preparation.
2. Identify commonly used restorative materials and describe their appropriate indications.
3. Apply appropriate preclinical techniques for cavity preparation and placement of restorative materials on simulated teeth.
4. Demonstrate safe and organized use of instruments and equipment in the preclinical operative dentistry environment.

9. Teaching and Learning Strategies

Lectures introduce the principles of cavity preparation and restorative materials using multimedia presentations and clinical correlations. Phantom-head and simulation-laboratory sessions provide supervised hands-on practice on artificial teeth. Demonstration, guided practice, feedback, and problem-solving activities are used to develop preclinical operative skills.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory / (2) laboratory	Definition of operative dentistry General terminology Aim of operative dentistry	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
2	(1) theory / (2) laboratory	Principles of cavity preparation Steps of cavity preparation	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
3	(1) theory / (2) laboratory	Types of caries	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
4	(1) theory / (2) laboratory	Rotary instruments and general instrumentation of cavitypreparation	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
5	(1) theory / (2) laboratory	Hand instruments and general instrumentation of cavity preparation	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
6	(1) theory / (2) laboratory	Sterilization of operative instruments	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
7	(1) theory / (2) laboratory	Amalgam cavity preparations for class 1 (buccal pit,)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
8	(1) theory / (2) laboratory	Amalgam cavity) preparations for class 1 (palatal pit	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
9	(1) theory / (2) laboratory	Amalgam cavity preparations for class 1 (lower 1st premolar)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
10	(1) theory / (2) laboratory	Amalgam cavity preparations for class 1 (lower 2nd premolar,)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
11	(1) theory / (2) laboratory	Amalgam cavity preparations for class 1 (upper 1st molar)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
12	(1) theory / (2) laboratory	Amalgam cavity preparations for class 1 (upper 1st molar with palatal extension) Amalgam cavity preparations for class 1 (lower 1st molar with extension	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
13	(1) theory / (2) laboratory	Cavity liners and cement bases cement bases cement bases (Zinc phosphate cement, Zinc oxide – eugenol cements) (Zinc polycarboxylate cement, Glass ionomer cement, Resin cement	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
14	(1) theory / (2) laboratory	Amalgam cavity preparations for class I1 (part 1) Amalgam cavity preparations for class I1 (part 2)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
15	(1) theory / (2) laboratory	Amalgam cavity preparations for class I1 MOD	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
16	(1) theory / (2) laboratory	Cavity liner (cavity varnish, Bonding, Calcium hydroxide	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
17	(1) theory / (2) laboratory	Amalgam cavity preparations for class I1I Amalgam cavity preparations for class V	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
18	(1) theory / (2) laboratory	Dental amalgam alloys (material)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
19	(1) theory / (2) laboratory	Dental amalgam placement	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
20	(1) theory / (2) laboratory	complex amalgam restoration Pin retained amalgam restoration Failures in amalgam restorations	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
21	(1) theory / (2) laboratory	Tooth colored restorations composite	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
22	(1) theory / (2) laboratory	Composite resin (material)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
23	(1) theory / (2) laboratory	Principles of cavity) preparation for composite ,restoration (CL III	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
24	(1) theory / (2) laboratory	Principles of cavity) preparation for composite restoration (, IV	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
25	(1) theory / (2) laboratory	Principles of cavity preparation for composite restoration (V)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
26	(1) theory / (2) laboratory	Composite resin placement	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
27	(1) theory / (2) laboratory	Adhesive system (Mechanism)	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
28	(1) theory / (2) laboratory	Bonding adhesive system	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.
29	(1) theory / (2) laboratory	Failures in anterior restorations	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
30	(1) theory / (2) laboratory	Flourid realizing materials	Conservative Dentistry	Theoretical lecture using PowerPoint presentation and practical laboratory work.	Semiannual and final examinations; practical requirements and quizzes.

11. Course Evaluation

The detailed 100-point distribution is not separately stated in the 2025-2026 course specification. Course assessment is implemented in accordance with College and University examination regulations.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Sturdevant's Art and Science of Operative Dentistry, 8th Edition, Andre Ritter.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD305 - Dental Radiology (Third Year)

1. Course Name:	Dental Radiology
2. Course Code:	TUD305
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Mariam Zainy Email: - mariam.zainy@turath.edu.iq

Supplementary Course Description

The course provides an overview of radiation physics, enables students to effectively read and diagnose dental radiographs, and equips students with the knowledge and skills to operate the x-ray machine correctly. In addition, the course explains the significance of radiation safety and protection measures in the dental field. This includes the types of film, techniques, and the interpretation of various structures and diseases in the maxillofacial region. Throughout both classroom and dental radiology clinic.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of radiation physics principles relevant to dental radiology and use.
2- Able to identify different types of dental radiographic film and apply appropriate techniques for optimal image capture.
3- Apply theoretical knowledge in a practical setting during dental radiology clinics, enhancing their clinical competencies.
4- Assess the quality of dental radiographs, recognizing factors that contribute to image clarity and diagnostic utility.
5- Effectively interpret dental radiographs to identify normal anatomical structures, pathologies, and diseases in the maxillofacial region.
6- Apply radiation safety protective measures for themselves and patients in clinical settings.

9. Teaching and Learning Strategies

Designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of anatomical concepts.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance understanding.
2. 3D Models and Simulations:
Purpose: to provide the visual and tactile learning experiences.
Approach: use of physical models and digital simulations to study comp anatomical structures and their relationship.
3. Dental radiology clinic:
Purpose: enhance students' ability to evaluate dental radiology radiographs and practice the theoretical techniques that acquire the necessary clinical skills to operate the use of dental radiology units.

Approach: allow the students to master the dental radiology units and clinical setting.
4. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	1- Physics of radiation (introduction and definitions of nature of radiation, type of radiation). X- ray machine and production of X-ray.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) clinical	2- Production of radiation (x- ray machine, interaction of x- ray with matter) composition of matter. X-ray film (types and indication).	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) clinical	3- Film imaging (types of x- ray films, processing cycle, dark room, intensifying screen). Intra-oral techniques (periapical, bitewings and occlusal films).	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) clinical	4- Intraoral projection (periapical, bitewing, and occlusal radiography). Ideal radiographic projection.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) clinical	5- Factors controlling x-ray beam (dosimetry and invers square low). Hazard and protection of radiation.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (2) clinical	6- Projection geometry (sharpness, distortion, image characteristics and artifacts). Anatomical Landmarks of maxilla.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (2) clinical	7- Biological effects of radiation (direct & indirect effects, deterministic and stochastic effect). Anatomical Landmarks of mandible.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) clinical	8- Safety and Protection (source of exposure, dose limits, exposure and risk and reducing dental exposure). Dental anomalies.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	9- Radiographic anatomy part1 (teeth, supporting structures, maxilla and mid facial bones). Dental panoramic radiography.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) clinical	10- Radiographic anatomy part2 (mandible, TMJ, restorative materials). Common disease (caries, PDL and inflammatory diseases).	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
11	(1) theory (2) clinical	11- Dental anomalies (acquired and developmental). Cysts (odontogenic and nonodontogenic)	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	12- Craniofacial anomalies (Cleft lip and palate). CBCT (indication and anatomy).	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (2) clinical	13- Panoramic radiography (principles, technique, position and interpretation). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (2) clinical	14- Digital radiography (strength, limitations, comparing with conventional radiography and indications). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	15- Craniofacial imaging (types, indication and interpretation). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) clinical	16- Cephalometric imaging (technique, indications, evaluation of the image). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) clinical	17- Radiographical interpretations of common diseases (interpretation of dental caries, and periodontal disease). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) clinical	18- Inflammatory conditions of the jaws (periapical inflammatory disease, osteomyelitis, pericoronitis). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) clinical	19- Cysts of the jaw (odontogenic and nonodontogenic cysts). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	20- Computed tomography (indications, strength, limitations). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) clinical	21- CBCT (principles, components, strength and limitations). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	22- CBCT (clinical applications in Maxillofacial region, anatomy and interpretations). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	23- Patient's management (management of child patient, contrast media and localization technique). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
24	(1) theory (2) clinical	24- Infection control (infection control in radiography clinic, protection of pt., protection of workers). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) clinical	25-Prescribing diagnostic Imaging (radiologic examination and guidelines for ordering imaging). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	26- Radiography &Implantology (modalities, indications). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	27- Advanced imaging modalities (CT, MRI and ultrasound). Clinical work.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	28- Salivary gland disease (imaging modalities, interpretation). Oral assessment.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (2) clinical	29- TMJ abnormalities (anatomy of TMJ, application). Oral assessment.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) clinical	30- Trauma (dentoalveolar trauma, dental fractures and bone fractures). Final Practical exam.	Oral Radiology	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Oral radiology -Principles and interpretation 2019 (White and pharoah's 8th ed.) An atlas of dental radiographic anatomy (Kasle 4th ed.) Electronic references or websites: https://radiopaedia.org/articles/periapical-radiolucency-teeth Recommended books and references:

	Journals Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

2 Bitewings.
4 Periapical.
Attending the demonstration of O.P.G.

Course Description Form

TUD306 - General Pathology (Third Year)

1. Course Name:	General Pathology
2. Course Code:	TUD306
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Lec. Hasan Qasim AL-Dayyei Email: -Hasan Qasim@turath.edu.iq Lec. Ahmed Natiq Dawood Email: - ahmedntq1990@gmail.com

Supplementary Course Description

The course provides an overview of general pathology, enabling students to understand the fundamental principles of disease processes and their underlying mechanisms. It equips students with the knowledge and skills to analyze pathological specimens and recognize the structural and functional changes associated with various diseases. This includes studying cellular adaptations, inflammation, tissue repair, hemodynamic disorders, and neoplasia, as well as the interpretation of related clinical and laboratory findings. The course combines theoretical instruction with hands-on practical sessions in both classroom and laboratory settings.

8. Course Objectives

Student Learning Outcomes (SLOs) for 3rd-Year Undergraduate Students in General Pathology
Upon successful completion of the General Pathology course, students will be able to:
Knowledge:
1. Describe the basic principles of pathology, including cellular adaptations, inflammation, tissue repair, hemodynamic disorders, and neoplasia.
2. Explain the mechanisms underlying various disease processes and their impact on the structure and function of tissues and organs.
3. Identify the etiology and pathogenesis of common diseases.
4. Differentiate between normal and pathological findings in histological and gross specimens.
5. Correlate pathological findings with clinical presentations and laboratory investigations.
Skills:
6. Examine and interpret histological slides to identify key pathological features.
7. Apply knowledge of pathology to analyze clinical case studies and diagnose disease processes.
8. Demonstrate proficiency in using laboratory equipment and following safety protocols during practical sessions.
9. Formulate differential diagnoses based on pathological evidence and clinical information.

9. Teaching and Learning Strategies

1. Lecture-Based Teaching
Interactive Lectures: Incorporate multimedia presentations, case-based discussions, and quizzes to make lectures engaging.
Concept Mapping: Use visual aids like flowcharts and diagrams to explain disease mechanisms.
2. Laboratory Sessions

Microscopy Practical: Provide hands-on experience in examining histological slides to identify pathological changes.
Demonstrations: Showcase autopsy findings, tissue samples, or models to bridge theoretical knowledge with clinical application.
Virtual Pathology Labs: Use digital pathology tools for enhanced learning experiences.
3. Case-Based Learning
Clinical Correlation: Present case studies to link pathological findings with clinical scenarios, encouraging diagnostic thinking.
Problem-Solving Activities: Assign case-based problems to promote critical thinking and collaborative learning.

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	1- Introduction to pathology Histopathological Technique	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) clinical	2- Morbid Anatomy (AUTOPSY). Importance of gross exam	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar+ Practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) clinical	3- Cell Injury, Cell Death Microscopic findings of necrosis	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) clinical	4- Cell Adaptation Microscopic findings of Adaptation	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) clinical	5- Intracellular Accumulation Microscopic findings of different types of intracellular accumulation	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (2) clinical	6- Intracellular Pigments Microscopic findings of different types of intracellular Pigments	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (2) clinical	7- Acute Inflammation Microscopic findings of Acute inflammation	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) clinical	8- Outcomes of acute inflammation Microscopic view of the outcome of acute inflammation	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	9- Chronic inflammation Microscopic findings of Chronic inflammation	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) clinical	10- GRANULOMATOUS INFLAMMATION Microscopic findings of Granuloma	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (2) clinical	11- Healing by Regeneration and Fibrosis Microscopic picture of healing process	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	12-Wound healing Wound healing process	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
13	(1) theory (2) clinical	13- HEMODYNAMIC DISORDERS Edema Mechanism	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (2) clinical	14- Hyperemia and Congestion Hyperemia and Congestion Microscopic pictures	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	15- Thrombosis Formation Thrombosis pathogenesis	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) clinical	16- Embolism Formation Different types of Emboli	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) clinical	17- Cells and Tissues of the Immune System Types of immunity	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) clinical	18- Types of Immune System Types of immune system	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) clinical	19- Autoimmune disorders Important examples of Autoimmune disorders	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	20- Examples of autoimmune diseases Microscopic view of Autoimmune disorders	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) clinical	21- NEOPLASIA Microscopic view of neoplasms	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	22- CHARACTERISTICS OF BENIGN AND MALIGNANT NEOPLASMS Microscopic pictures of tumors	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	23- DYSPLASIA Microscopic grades of different grades of Dysplasia	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	24- Difference between Benign and malignant tumors Microscopic View of Benign and Malignant tumors	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) clinical	25-PRECANCEROUS CONDITIONS Microscopic view of Precancerous Conditions	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	26- GRADING AND STAGING OF CANCERS TNM system assessment	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	27-PATHOLOGY OF INFECTIOUS DISEASES Infectious disease routes of entry	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	28- Categories of infectious agents Different types of infectious agents	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
29	(1) theory (2) clinical	29- Viral Respiratory infections Oral assessment.	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) clinical	30- Bacterial Respiratory Infections Final Practical exam.	Pathology Unit	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, Semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Robbins and Cotran Pathologic Basis of Disease (2015)
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD307 - Oral Surgery (Third Year)

1. Course Name:	Oral Surgery
2. Course Code:	TUD307
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Mohamed Al-Awadi. Email: - mohamed.sadiq@turath.edu.iq

Supplementary Course Description

The Oral Surgery course for third-year dental students at the College of Dentistry, Al-Turath University, provides foundational knowledge and practical skills in oral surgical procedures. Students will learn basic surgeries like tooth extractions, soft tissue lesion management, and local anesthesia administration. The course includes lectures, hands-on practice, and clinical rotations. Key topics cover surgical techniques, post-operative care, trauma management, and surgical emergencies. Assessment involves written exams, practical demonstrations, and clinical evaluations.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Perform basic oral surgeries, such as extractions and lesion management.
2- Administer local anesthesia and manage its complications.
3- Diagnose and treat common oral surgical conditions, including trauma and infections.
4- Provide effective post-operative care and follow-up.
5- Manage oral surgical emergencies with clinical competence and decision-making skills.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory	Diagnosis in oral surgery History taking Demographic data Chief complaint History of present complaint Past dental and medical history Social and family history	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory	Diagnosis in oral surgery Examination Extra-oral examination Intra-oral examination - Differential diagnosis - Diagnosis of pain, lump, and ulcer Consent	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory	Infection Control in Surgical Practice - Communicable pathogenic organisms Aseptic techniques Terminology Concepts Techniques of Instrument Sterilization; Sterilization with Heat; Sterilization with Gas Techniques of Instrument Disinfection	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory	Infection Control in Surgical Practice Maintenance of Sterility Surgical Field Maintenance Operatory Disinfection Surgical Staff Preparation Postsurgical Asepsis	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory	Extraction of teeth and Contra indications of extraction Extraction of teeth (exodontia). Definition. Methods of extraction. Indications of teeth extraction.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory	Extraction of teeth and Contra indications of extraction Contra-indications of teeth extraction. Local contra-indications. Systemic contra-indications. Pre-extraction evaluation. Clinical preoperative evaluation. General evaluation. Local evaluation. Radiological evaluation. Objectives and benefits	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory	General arrangement for extraction and Dental forceps (types) Light. Position of the operator. Position of the patient. Height of the dental chair. Parts of dental forceps. Forceps for the maxillary teeth. Forceps of upper anterior teeth. Forceps of upper premolars. Forceps of upper molars. Bayonet of upper posterior teeth.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory	General arrangement for extraction and Dental forceps (types) Forceps for the mandibular teeth. Forceps of lower anterior teeth. Forceps of lower premolars. Forceps of lower molars. Bayonet of lower posterior teeth. Mechanical principle of forceps (traditional) extraction.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
9	(1) theory	Techniques of forceps extraction and post-operative instructions Soft tissue retraction. Handling of the forceps. Cheek retraction and support (the use of the non-working hand). The application of the forceps blades to the tooth (tooth grasp). The displacement of the tooth from its socket. Post-operative care to the extraction socket. Instruction to the patient.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory	Elevators Line of withdrawal. Point of application. Parts of dental elevators. Mechanical principles of using dental elevators. Wheel and axil. Fulcrum. Wedging. Combination of mechanical principles.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory	Elevators Clinical uses of elevators. Straight elevators. Coupland's chisel. Cryer's elevator. Winter's elevator. Apexo elevator. Warwick-James elevator. Guiding principles for using dental elevators. Complications of using dental elevators	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory	Complications of dental extraction Failure to secure anesthesia. Failure to remove the tooth with either forceps or elevator. Fracture (#) of crowns and roots, alveolar bone, maxillary tuberosity, adjacent or opposing tooth, mandible. Dislocation of the tempro-mandibular joint (T.M.J.). Displacement of a root into the soft tissue and tissue spaces and the maxillary antrum.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory	Complications of dental extraction 1 76 Excessive bleeding after extraction. Damage to the surrounding soft tissues. Post - operative pain. Post-operative swelling. Creation of an oro-anrtal communication. Trismus.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory	Basic surgical instruments Instruments of basic oral surgery. Instruments to incise tissues. Instruments for elevating mucoperiosteum. Instruments for controlling hemorrhage. Hemostat (artery forceps). Instruments to grasp tissues. Toothed-tissue forceps. Allis tissue forceps. Instruments for removing bone. Rounger forceps (bone cutter and bone nibbler). Chisel and mallet. Bone file. Surgical burs and handpiece. Instruments to remove soft tissues from bony defects. Surgical curette.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory	Introduction to local anesthesia Neurophysiology Mode and site of action of local anesthetic Active forms of local anesthetics	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
16	(1) theory	Pharmacology of local anesthesia Pharmacokinetics of local anesthetics Metabolism Systemic actions of local anesthetics	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory	Pharmacology of local anesthesia Vasoconstrictors Mode of action 1 77 Dilutions of vasoconstrictors Specific agents	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory	Surgical anatomy in local anesthesia Trigeminal nerve: Ophthalmic branch Maxillary branch Mandibular branch	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory	Surgical anatomy in local anesthesia Osteology of the maxilla Osteology of the mandible	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory	Instruments of local anesthesia The Syringe The Needle The Cartridge Additional Armamentarium Preparation of the Armamentarium	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory	Techniques of local anesthesia Basic injection techniques Techniques of maxillary anesthesia Local infiltration. Posterior superior alveolar nerve block Middle superior alveolar nerve block Anterior superior alveolar nerve block (infraorbital nerve block) Greater palatine nerve block Nasopalatine nerve block Maxillary nerve block	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory	Techniques of local anesthesia Techniques of local anesthesia Techniques of mandibular anesthesia Inferior alveolar nerve block Buccal nerve block Mandibular nerve block: The Gow-Gates technique Vazirani-Akinosi closed-mouth mandibular block Mental nerve block Incisive nerve block	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory	Techniques of local anesthesia Supplemental injection techniques Intraosseous injection Periodontal ligament injection Intraseptal injection Intrapulpal injection	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory	Complications of local anesthesia Local Complications Needle breakage Prolonged anesthesia (paresthesia) Facial nerve paralysis Ocular complications 1 78 Trismus Soft tissue injury Hematoma	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory	Complications of local anesthesia - Pain on injection - Burning on injection - Infection - Edema - Sloughing of tissues - Postanesthetic intraoral lesions	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory	Complications of local anesthesia Systemic complications Overdose - Allergy	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
27	(1) theory	Advances in local anesthesia Computer controlled local anesthetic delivery Articaine hydrochloride Local anesthesia reversal Buffering of local anesthetic solution Nasal local anesthetic mist for maxillary nonmolar teeth	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory	Conscious sedation Sedation techniques: Oral, sublingual, transdermal, intranasal, intramuscular, intravenous and inhalational Nitrous oxide Complications and medicolegal considerations	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory	Fundamentals of general anesthesia Types of general anesthesia used in dentistry Advantages Disadvantages Indications Contraindications	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory	Medical emergencies during dental treatment Overview of medical emergencies Basic measures, equipment and drugs Common emergencies Collapse Anaphylaxis Cardiac arrest Diabetic collapse due to hypoglycemia Fits and convulsions Adrenal crisis Acute severe asthma Chest pain	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	"Peterson's Principles of Oral and Maxillofacial Surgery" 4th edition 2022 by Michael Miloro, Peter L. Pelz, and Arthur L. Kaban
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements
Required Cases: Performing simulated anesthetic techniques.

Course Description Form

TUD308 - Prosthodontics (Third Year)

1. Course Name:	Prosthodontics
2. Course Code:	TUD308
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Dr. Saad yassen

Supplementary Course Description

This Prosthodontics course for third-year dental students introduces the principles of restoring and replacing missing teeth using fixed, removable, and implant prostheses. Students will learn treatment planning, patient assessment, and prosthetic design, with hands-on experience in both laboratory and clinical settings. The course emphasizes material selection, occlusion, aesthetic considerations, and managing common prosthodontic cases. Students will develop skills for creating functional and aesthetically pleasing prostheses. By the end, they will be prepared to provide comprehensive prosthodontic care in a clinical environment.

8. Course Objectives

- Learning various and miscellaneous topics in prosthodontics through theoretical lectures.
- Teaching students the Laboratories steps in treating prosthodontic patients.
- Providing the student with skills to deal with patients in clinical settings.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:

1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	1 theory 2 labs	Partial dentures • Removable partial denture (RPD) • Objectives for RPD construction • Causes of teeth loss • Indications of removable partial dentures • Fixed partial denture • Indications for fixed partial denture • Dental implant therapy • Contraindications for dental implant therapy • Terminology and re- finishing	Introduction to Removable Partial Dentures	PowerPoint presentation	Quiz
2	(1) theory / (2) laboratory	•Need for classification. Requirements of an acceptable method of classification • Removable partial dentures may be classified according to the type of support • Removable partial dentures may be classified according to the type of material • Removable partial dentures may be classified according to the type of treatment • Classification based on arch configuration • Kennedy – Applegate – Fiset classification system. • Applegate's rules governing the application of the Kennedy classification method	Classification of Partially Edentulous Arches	PowerPoint presentation	Quiz
3	(1) theory / (2) laboratory	The ideal requirements for successful removable partial denture • Purposes (Objective) of Surveying the Diagnostic Cast • Advantages of single path of placement (insertion) • Guiding planes • Dental surveyor • Types of dental surveyors • Parts of dental surveyor (Ney type surveyor)	Surveying	PowerPoint presentation	Quiz
4	(1) theory / (2) laboratory	• Principles of surveying • Types of undercuts established by surveying • Factors that determine and affect the path of placement (insertion) and removal of the RPD • Rules of surveying	Surveying (continue)	PowerPoint presentation	Quiz
5	(1) theory / (2) laboratory	• Main components of RPD • Major connectors • Requirements of major connectors • Guidelines for design and location of major connectors • Characteristics of major connectors	Component Parts of a Removable Partial Denture	PowerPoint presentation	Quiz
6	(1) theory / (2) laboratory	• Special Structural Requirements for Maxillary Major Connectors • Types of Maxillary Major Connector • Single palatal bar • Single palatal strap • Anterior - posterior palatal bars • Combination anterior and posterior palatal strap – type connector • Palatal plate -type connector • U -shaped palatal connector	Maxillary Major Connectors	PowerPoint presentation	Quiz

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
7	(1) theory / (2) laboratory	• Special structural requirements • Types of mandibular major connectors ✓ Lingual bar ➢ Methods that may be used to determine the relative height of the floor of the mouth ✓ Lingual plate (linguoplate) ➢ The indications for the use of linguoplate ✓ Double lingual bar (lingual bar with cingulum bar) ➢ Indications for use of double lingual bar ✓ Labial bar ➢ Indications for use of labial bar ➢ Characteristics and location	Mandibular Major Connectors	PowerPoint presentation	Quiz
8	(1) theory / (2) laboratory	• Definition • Functions • Form & location • Basic types of minor connectors • Tissue stops • Finishing lines • Reaction of Tissue to Metallic Coverage	Minor Connectors	PowerPoint presentation	Quiz
9	(1) theory / (2) laboratory	• The purposes of the rest in general • Occlusal Rest • Extended Occlusal Rest • Interproximal Occlusal Rest • Internal Occlusal Rests • Occlusal Rest Seat Preparation • Occlusal Rests on Amalgam Restorations • Occlusal Rest on Crowns • Lingual Rests (Cingulum Rest) • Incisal Rests and Rest Seats • Implants as a Rest	Rests and Rest Seats	PowerPoint presentation	Quiz
10	(1) theory / (2) laboratory	• Direct retainers • Indirect retainers • The extra coronal retainer (Clasp type) • Component parts, Function, and position of clasp assembly parts • Factors affecting the magnitude of retention • The basic principles of clasp design	Retention and Removable Partial Denture Retainers	PowerPoint presentation	Quiz
11	(1) theory / (2) laboratory	• Clasps designed without movement accommodation. • Circumferential (Circle or Akers) clasp • Ring -type clasp • Embrasure (double Akers) clasp • Back action clasp • Multiple clasps • Half-and-half Clasp • Reverse -action clasp (Hairpin) • Disadvantages of circumferential clasps in summary • Clasps designed to accommodate distal extension functional movement • RPI clasp	Extra Coronal Direct Retainers (Types of clasp assemblies)	PowerPoint presentation	Quiz
12	(1) theory / (2) laboratory	• Internal attachments • Precision Attachments ✓ Some indications for precision attachments ✓ Some of the contraindications for precision attachments ✓ The main types of precision attachments • Selection of an Attachment for a Removable Partial Denture	Intracoronal Direct Retainers (Internal Attachments, Precision Attachments	PowerPoint presentation	Quiz
13	(1) theory / (2) laboratory	• Stress breakers ✓ Types of stress breakers	Stress - Breakers (Stress Equalizers)	PowerPoint presentation	Quiz

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
14	(1) theory / (2) laboratory	• The main factors influencing the effectiveness of an indirect retainer • The auxiliary functions of indirect retainers • Forms of Indirect Retainers	Indirect Retainers	PowerPoint presentation	Quiz
15	(1) theory / (2) laboratory	• Auxiliary occlusal rest • Lingual rest • Incisal rest • Canine extensions from occlusal rests • Cingulum bars (continuous bars) and linguo -plates • Modification areas • Rugae support	Indirect Retainers (continue)	PowerPoint presentation	Quiz
16	(1) theory / (2) laboratory	• Blockout and relief • Cast preparation • Types of blockout of master cast ✓ Parallel blockout ✓ Shaped blockout ✓ Arbitrary blockout • Relieving the master cast • Purpose of relief • Sites • Tissue Stops	Laboratory procedures in RPD construction: Blockout and Relief	PowerPoint presentation	Quiz
17	(1) theory / (2) laboratory	• Duplicating a stone cast • Duplicating material and flask • Impression • Refractory cast	Laboratory procedures in RPD construction: Duplication and Refractory Cast Construction	PowerPoint presentation	Quiz
18	(1) theory / (2) laboratory	• Waxing the framework • Spruing • General rules for spruing • Investing the sprued pattern • Purpose of investment • Burnout	Laboratory procedures in RPD construction: Wax Pattern	PowerPoint presentation	Quiz
19	(1) theory / (2) laboratory	• Casting • Casting recovery • Finishing the framework • Sprue removal	Laboratory procedures in RPD construction: Casting and Finishing	PowerPoint presentation	Quiz
20	(1) theory / (2) laboratory	• The primary function of denture base • Types of denture base according to support • Types of the denture base according to materials • Advantages of metal denture base • Disadvantages of metal denture base • Design consideration of denture base • Periodontal consideration of denture base design • Types of artificial teeth	Denture Base in RPD	PowerPoint presentation	Quiz
21	(1) theory / (2) laboratory	• Record bases • Types of record bases according to materials constructed from it • Occlusion rims • Occlusion rims for static jaw relation records • Occlusion rims for recording functional or dynamic jaw relationship record • Mounting casts on the articulator • Arrangement of artificial teeth to the opposing cast • Principles that should be taken during arrangement of artificial teeth • Laboratory procedure of arrangement teeth (Example)	Record Bases, Occlusion Rims, Mounting and Arrangement of Teeth	PowerPoint presentation	Quiz
22	(1) theory / (2) laboratory	• Biomechanical considerations • Possible movements of partial dentures • Tooth-tissue– supported prosthesis	Biomechanics of Removable Partial Dentures	PowerPoint presentation	Quiz
23	(1) theory / (2) laboratory	• Tooth -supported partial denture • Occlusal Rest Seat Preparation and Denture Movement • Impact of Implants on Movements of Partial Dentures	Biomechanics of Removable Partial Dentures (continue)	PowerPoint presentation	Quiz

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
24	(1) theory / (2) laboratory	• Difference in Prosthesis Support and Influence on Design • Differentiation Between Two Main Types of Removable Partial Dentures	Principles of Removable Partial Denture Design	PowerPoint presentation	Quiz
25	(1) theory / (2) laboratory	• Components of Partial Denture Design • Implant Considerations in Design	Principles of Removable Partial Denture Design (continue)	PowerPoint presentation	Quiz
26	(1) theory / (2) laboratory	• 1st Phase: Education of patient • 2nd Phase: Diagnosis, Treatment Planning, Design, Treatment Sequencing, and Mouth Preparation • 3rd Phase: Support for Distal Extension Denture Bases • 4th Phase: Establishment and Verification of Occlusal Relations and Tooth Arrangements • 5th Phase: Initial Placement Procedures • 6th phase: Periodic Recall	Clinical Phases of Removable Partial Denture Construction	PowerPoint presentation	Quiz
27	(1) theory / (2) laboratory	• Acrylic removable partial dentures • Appearance • Maintenance of space • Reestablishment of occlusal relationships • Conditioning of teeth and residual ridges • Interim restoration during treatment • Conditioning the patient for wearing a prosthesis • Clinical procedure for placement	Acrylic Removable Partial Dentures	PowerPoint presentation	Quiz
28	(1) theory / (2) laboratory	• Flexible removable partial dentures • Type of material used for the flexible denture • Support • Retention	Flexible Removable Partial Dentures	PowerPoint presentation	Quiz
29	(1) theory / (2) laboratory	• Broken clasp arms • Several reasons for breakage of clasp arms • Fractured occlusal rests • Distortion or breakage of other components – major and minor connectors • Addition of a new artificial tooth to a RPD • Repair by soldering	Repairs and Additions to Removable Partial Dentures	PowerPoint presentation	Quiz
30	(1) theory / (2) laboratory	• Components of CAD/CAM system • Types of Digital Scanner • Digital RPD Framework Design (step by step) • Digital Fabrication Process	Digitally Designed & Fabrication Process of RPD Framework Using CAD/CAM System	PowerPoint presentation	Quiz

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted

Student Grade	Grading system
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: • McCracken's Removable Partial Prosthodontics 13th edition 2015 by Carr and Brown
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD309 - Crown and Bridge (Third Year)

1. Course Name:	Crown and Bridge
2. Course Code:	TUD309
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning combining theoretical instruction with laboratory and simulation training.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Shahad Wissam Email: shahad.wisam@turath.edu.iq

Supplementary Course Description

A preclinical course that introduces basic fixed prosthodontic principles and techniques required for tooth preparation, provisional restorations, and the clinical and laboratory procedures necessary for definitive fixed prostheses. Students are trained on artificial teeth mounted in phantom heads in preparation for clinical patient care in the following year.

8. Course Objectives

Upon completion of the course, students should be able to:
1. Establish a basic diagnosis, prognosis, and treatment strategy for the partially dentate patient.
2. Explain the effects of tooth loss on function, aesthetics, and psychological well-being.
3. Select appropriate fixed restorative modalities to restore function and aesthetics in a predictable manner.
4. Demonstrate the preclinical principles and techniques of tooth preparation and provisional restoration.
5. Recognize the evidence base supporting contemporary fixed prosthodontic treatment.

9. Teaching and Learning Strategies

Lectures introduce fixed prosthodontic principles, tooth preparation, provisional restorations, and laboratory procedures using multimedia presentations and clinical correlations. Phantom-laboratory sessions provide supervised training in instrument use, ergonomic working positions, tooth preparation, and the practical procedures required for fixed prosthodontics.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory / (2) laboratory	1- An introduction to fixed prosthodontic	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory / (2) laboratory	2- Biomechanical principles of tooth preparation	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
3	(1) theory / (2) laboratory	3- Finishing line of the preparation	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory / (2) laboratory	4- Full metal crown	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory / (2) laboratory	5- Porcelain fused to metal crown	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory / (2) laboratory	6- Complete ceramic crown (Porcelain Jacket Crown)	Fixed prosthodontics	using PowerPoint presentation. Seminar + practical work.	semiannual and final exams. Seminar and requirement
7	(1) theory / (2) laboratory	7- Partial veneer crown (three-quarter crown)	Fixed prosthodontics	using PowerPoint presentation. Seminar + practical work.	semiannual and final exams. Seminar and requirement
8	(1) theory / (2) laboratory	8- Post crown	Fixed prosthodontics	presentation. Seminar + practical work.	exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory / (2) laboratory	9- Impression for crown and bridge work	Fixed prosthodontics	Seminar + practical work.	Seminar and requirement Evaluation +Quiz.
10	(1) theory / (2) laboratory	10- Final impression	Fixed prosthodontics	using PowerPoint presentation. Seminar + practical work.	semiannual and final exams. Seminar and requirement
11	(1) theory / (2) laboratory	11- Working cast and dies	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
12	(1) theory / (2) laboratory	12- Provisional restoration	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory / (2) laboratory	13- Investing	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory / (2) laboratory	14- Permanent Cementation	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory / (2) laboratory	15- Burnout and casting	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory / (2) laboratory	16- cleaning and finishing of cast restorations	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory / (2) laboratory	17- clinical try in and adjustment.	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory / (2) laboratory	18- waxing	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory / (2) laboratory	19- CAD /CAM Technolog crown construction	Fixed prosthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	8%	17%	25%
Midterm	15%	0%	15%
Final	40%	20%	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Contemporary Fixed Prosthodontics, 6th Edition (2022), Stephen F. Rosenstiel.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Course Description Form

TUD310 - Dental Ethics (Third Year)

1. Course Name:	Dental Ethics
2. Course Code:	TUD310
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite theoretical learning with case-based discussion and interactive activities.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 0 hour/week; Total annual contact hours: 30; Total units: 2 (Theory units: 2; Practical/Clinical units: 0).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Ahmed Basheer Ayyed Email: ahmed.basher@uoturath.edu.iq

Supplementary Course Description

The Dental Ethics course provides a foundation in the ethical principles and professional standards essential for dental practice. Through lectures, case studies, and interactive discussion, students examine patient autonomy, informed consent, confidentiality, beneficence, non-maleficence, justice, veracity, professionalism, and ethical decision-making in clinical practice.

8. Course Objectives

Upon completion of the course, students should be able to:
1. Identify and explain key ethical principles, including autonomy, beneficence, non-maleficence, justice, and veracity, in dental practice.
2. Apply ethical decision-making frameworks to clinical dilemmas.
3. Communicate effectively about ethical issues with patients, colleagues, and other healthcare professionals.
4. Evaluate common ethical challenges, including informed consent, confidentiality, and conflicts of interest.
5. Demonstrate professionalism and ethical behavior that support patient trust and the integrity of the dental profession.

9. Teaching and Learning Strategies

A blended approach combines theoretical instruction with practical application. Lectures introduce core ethical principles and professional standards; interactive discussion and case studies develop critical analysis of real-world dilemmas. Role-playing and group activities support ethical reasoning, communication, reflection, and collaborative decision-making.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	1	Principal Features of Dental Ethics (Part I)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
2	1	Principal Features of Dental Ethics (Part 2)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
3	1	Principal Features of Dental Ethics (Part 3)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
4	1	Principal Features of Dental Ethics (Case Studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
5	1	Principal Features of Dental Ethics (Life time application)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
6	1	Dentists and Patients. (Part 1)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
7	1	Dentists and Patients. (Part 2)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
8	1	Dentists and Patients. (Case studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
9	1	Dentists and Patients. (Case studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
10	1	Dentists and Patients. (Critical thinking)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
11	1	Dentists and Patients. (Journal reviews)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
12	1	Dentists and Society (Part I)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
13	1	Dentists and Society (Part 2)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
14	1	Dentists and Society (Case studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
15	1	Dentists and Society (Case studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
16	1	Dentists and Society (Journal review)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
17	1	Dentists and Society (Life application)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
18	1	Dentists and Colleagues (Part I)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
19	1	Dentists and Colleagues (Part 2)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
20	1	Dentists and Colleagues (Case studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
21	1	Dentists and Colleagues (Journal Review and critical thinking)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
22	1	Ethics and Research (Part 1)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
23	1	Ethics and Research (Part 2)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
24	1	Ethics and Research (Case studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
25	1	Conclusion (Part 1)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
26	1	Conclusion (Part 2)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
27	1	Project preparation (Case studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
28	1	Project preparation (Case studies)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
29	1	Project preparation (Journals review)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.
30	1	Project preparation (Journals review)	Dental Ethics	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semiannual, and final examinations; seminar, requirements evaluation, and quizzes.

11. Course Evaluation

The detailed 100-point distribution is not separately stated in the 2025-2026 course specification. Course assessment is implemented in accordance with College and University examination regulations.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Dental Ethics Manual, FDI World Dental Federation (2016).
Main references (sources)	Dental Ethics Manual, FDI World Dental Federation (2016).
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	FDI World Dental Federation - Dental Ethics Manual.

Course Description Form

TUD401 - General Medicine (Fourth Year)

1. Course Name:	General Medicine
2. Course Code:	TUD401
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 0 hour/week; Total annual contact hours: 30; Total units: 2 (Theory units: 2; Practical/Clinical units: 0).
7. Course administrator's name (mention all, if more than one name)	Lec. Nibras Riyadh Khadim. Email: - nibras.riyadh@turath.edu.iq

Supplementary Course Description

The course aims to provide students with the knowledge and skills that allow them to recognize different medical and dermatological as well as systemic diseases related to dentist and different medical problems. Manage different dental complications of medical illness. Also provides students with basic life support and clinical training taking history and examination

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of anatomy and physiological and pathological principles relevant to general medicine
2- Gain proper clinical skills in evaluating patients with different medical condition
3- Apply theoretical knowledge in a practical setting during practical skills and communicational, enhancing their clinical competencies.
4- Assess the ability to discuss the clinical approach to common clinical conditions.
Diagnose and help in the management of common medical emergencies in the Emergency Room under the supervision of more senior doctors.
5-Demonstrate abilities to present medical information and knowledge to colleagues and students.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of systemic disease concepts.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance
4. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory	1- diabetes mellitus 1 communication skills 1. Communicating in Difficult Situations 2. Handling hostility	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory	2- -diabetes mellitus 2. General aspects of history taking The importance of a clear history Gathering information Difficult situations	General medicine	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory	3- adrenal gland 1 Managing clinical encounters with patients	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory	4-throid gland disease History and examination for endocrine part 1.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory	5.hemostasis and bleeding disorder History and examination for hematology	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory	6).gastrointestinal disease Case seminar	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory	7- hypertension The cardiovascular system. Pulse, blood pressure Interpretation of the findings Investigations	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory	8- white blood disorder Medical History of blood disorders. physical findings that can be related to a blood disorder.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory	9-peptic ulcer GIT HISTORY AND EXAMINATIOM	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory	10- INTESTINE The history The physical examination (Video 3)	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory	11-infective endocarditis The cardiovascular system Heart	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory	12- ischemic heart disease History Taking in Clinical Practice	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory	13-psedomonas colitis Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory	14-heart failure Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
15	(1) theory	15-cardiac arrhythmia Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory	16-kidney disease Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory	17-imunological disorder Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory	18-Liver disease Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory	19-infctious disease Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory	20-pulmanory disease Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory	21- asthma Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory	22- red blood cell disorder Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory	23- renal failure Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory	24-stroke and related disorder Clinical work History and neurological examination.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory	25- chronic pulmonary obstructive disease Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory	26-pulmonary embolism Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory	27- epilepsy and seizure disorder Clinical work.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory	28- drug and alcohol abuse History and examination case assesment.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory	29- psychiatric disorder Clinical assesment.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory	30-neurological disorder. Final Practical exam.	General medicine	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	25% (Weekly Quizzes) (Semester Exam) (Student Attendee)		25%
Midterm	15% (Written Exam)		15%
Final	60% (Written Exam)		60%
Total	100%		100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Main Reference: Davidson's Principles and Practice of Medicine" 24th edition, 2022. Edited by Ian D. Penman, Stuart H. Ralston Electronic references or websites: https://pmc.ncbi.nlm.nih.gov/ Recommended journal and references: AMA (American Medical Association). Electronic references or websites: PubMed
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Observation and understanding of medical history and physical examination.
Participation in patient assessments in clinical settings (approximately 10-15 patients).
Collaboration with medical professionals in multidisciplinary cases.

Course Description Form

TUD402 - General Surgery (Fourth Year)

1. Course Name:	General Surgery
2. Course Code:	TUD402
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 0 hour/week; Total annual contact hours: 30; Total units: 2 (Theory units: 2; Practical/Clinical units: 0).
7. Course administrator's name (mention all, if more than one name)	Ass. Prof. Tarek Mahdi Salih Email: - tarekmsaleh@turath.edu.iq

Supplementary Course Description

The General Surgery course provides dental students with essential knowledge and skills in basic surgical principles. It covers preoperative assessment, aseptic techniques, and post-operative care, with a focus on oral and maxillofacial surgery. The course includes hands-on training in clinical settings, enabling students to assist in various surgical procedures. Emphasis is placed on understanding the surgical management of common conditions affecting the oral cavity and surrounding structures. The aim is to prepare students for interdisciplinary collaboration in surgical and dental practices.

8. Course Objectives

Understand basic surgical principles, including preoperative, intraoperative, and postoperative care.
Assist in diagnosing and managing oral and maxillofacial surgical conditions.
Perform basic surgical procedures, such as extractions, under supervision.
Collaborate effectively with healthcare professionals in surgical settings.
Identify and manage potential surgical complications to ensure patient safety.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of systemic disease concepts.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance
4. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory	Metabolic response to injury BASIC CONCEPTS IN HOMEOSTASIS MEDIATORS OF THE METABOLIC RESPONSE TO INJURY Physiological response to injury ((THE 'EBB AND FLOW' MODEL)) Insulin resistance AVOIDABLE FACTORS THAT COMPOUND THE RESPONSE TO INJURY Systemic inflammation and tissue response Clinical work	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory	Wound healing Introduction Classification of wound Healing Normal sequence of wound Healing Factors affecting healing (local & systemic) Complications of wound healing. Oral assessment	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory	Surgical wound infections Surgical sepsis Types of wounds Infecting organisms (Exogenous organisms, Endogenous organisms) Prevention of wound Infections Clinical features of wound Sepsis Diagnosis of wound sepsis Treatment Clinical work	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory	4- Hemorrhage Introduction Pathophysiology Definitions (Revealed and concealed hemorrhage, Primary, reactionary and secondary hemorrhage Surgical and nonsurgical hemorrhage) Degree and classification Management (Identify hemorrhage, Immediate resuscitative maneuvers, Identify the site of hemorrhage, Hemorrhage control) Damage control surgery Oral assessment	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory	5 Shock Introduction Pathophysiology Ischemia–reperfusion syndrome Classification of shock Consequences Unresuscitatable shock Multiple organ failure RESUSCITATION Fluid therapy Oral assessment	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory	Blood transfusion Introduction Blood and blood products Indications for blood transfusion Blood groups and cross-matching Transfusion reactions Cross-matching Complications of blood transfusion Management of coagulopathy Clinical work	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory	7- Parenteral feeding Introduction Route of delivery Peripheral central venous access Complications of parenteral nutrition Refeeding syndrome Clinical work	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
8	(1) theory	Fluid balance Abnormalities of body water Fluid overload and oedema Abnormalities of electrolytes Fluid replacement Acid-base balance Abnormalities of acid-base balance Oral assessment	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory	Electrolytes balance Introduction Principles of electrolyte balance Normal homeostasis Barriers between compartments, osmolality and electrolyte concentrations Homeostatic mechanisms Clinical work.	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory	Introduction 2 Cerebral blood flow Initial evaluation and management Mechanism Neurological progression Examination: primary survey Glasgow Coma Score secondary survey CLASSIFICATION OF SEVERITY TYPE OF HEAD INJURY Clinical work	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory	Preoperative preparation (History Taking) Introduction to the Patient History of the presenting Complaint Relevant medical history Family history Drug therapy Social history Allergies Common surgical symptoms Terms used in General Surgery and History Taking Oral assessment	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(2) theory	Anesthesia & Pain HISTORY GENERAL ANAESTHESIA Management of airway during Anesthesia Complications of intubation Ventilation during anesthesia Monitoring and care during anesthesia Chronic pain management Chronic pain control in benign disease Pain control in malignant disease Clinical work	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(2) theory	Perioperative care Introduction Factors that predispose patients to a high risk of morbidity and mortality Patient factors Surgical factors Optimize medical management of coexisting diseases and intraoperative considerations Ischemic heart disease Respiratory failure SPECIFIC Strategies Clinical work.	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
14	(2) theory	Postoperative care SYSTEM-SPECIFIC POSTOPERATIVE COMPLICATIONS Respiratory complications Cardiovascular complications Renal and urinary complications COMPLICATIONS RELATED TO SPECIFIC SURGICAL SPECIALTIES Paralytic ileus Compartment syndrome Neck surgery Neurosurgery Clinical work.	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(2) theory	GENERAL POSTOPERATIVE PROBLEMS AND MANAGEMENT Nausea and vomiting Bleeding Deep vein thrombosis Hypothermia and shivering Fever Pressure sores Drains Wound care Wound dehiscence DISCHARGE OF PATIENTS Clinical work.	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(2) theory	Day case surgery Definition SELECTION CRITERIA PREOPERATIVE ASSESSMENT SURGERY DISCHARGE Clinical work.	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(2) theory	Surgical ethics and law INTRODUCTION INFORMED CONSENT MATTERS OF LIFE AND DEATH CONFIDENTIALITY RESEARCH Clinical work.	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory	Patient safety INTRODUCTION THE PREVALENCE OF ADVERSE HEALTHCARE EVENTS COMMON CAUSES OF ADVERSE HEALTHCARE EVENTS PATIENT SAFETY AND THE SURGEON CARING FOR THE SECOND VICTIM Clinical work.	General Surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	25% (Weekly Quizzes) (Semester Exam) (Student Attendee)		25%
Midterm	15% (Written Exam)		15%
Final	60% (Written Exam)		60%
Total	100%		100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good

Student Grade	Grading system
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Books Required Reading: Bailey & Love's Short Practice of Surgery 28th edition 2023 Recommended references (sources): ATLS (Advance trauma life support) Surgical critical care and emergency second edition Basic surgical skills. Macloid clinical examination 14th edition. Macloids clinical diagnosis 2-nd edition. B-Electronic references, Internet sites. PubMed
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Observation and participation in surgeries (approximately 5-10 cases).
Involvement in pre-operative and post-operative care (10-15 cases).
Basic surgical techniques in minor oral surgeries (5-7 cases).

Course Description Form

TUD403 - Oral Surgery (Fourth Year)

1. Course Name:	Oral Surgery
2. Course Code:	TUD403
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 4 hour/week; Total annual contact hours: 150; Total units: 6 (Theory units: 2; Practical/Clinical units: 4).
7. Course administrator's name (mention all, if more than one name)	Prof. Dr. Ali Hussien Abbas Email: - dralialhussaini@uoturath.edu.iq

Supplementary Course Description

• Development of Surgical Skills: Aimed at enhancing students' skills in performing simple and intermediate oral surgeries, including extraction of decayed teeth, excision of tumors, and minor maxillofacial bone surgeries.
• Patient Assessment and Management: Focuses on teaching students how to evaluate patient cases related to oral surgery and plan appropriate surgical treatment.
• Anesthesia Management: Educates students about different types of anesthesia used in oral surgery and how to select the appropriate type for each case.
• Clinical Practical Training: Includes hands-on training in university clinics where students can practice oral surgery under the supervision and guidance of professors and experts.
• Ethics and Legal Responsibilities: Enhances students' understanding of ethical and legal responsibilities related to practicing oral surgery and patient anesthesia.

8. Course Objectives

Clinical Competence: Perform basic oral surgical procedures (e.g., extractions, biopsies) safely, administer local anesthesia, and manage surgical complications and emergencies.

Comprehensive Knowledge: Apply detailed understanding of anatomy, pharmacology, diagnosis, and treatment planning for oral surgical cases.

Professional Communication: Communicate effectively with patients and collaborate with healthcare professionals, demonstrating ethical and patient-centered care.

Lifelong Learning: Incorporate evidence-based practice and commit to continuous improvement in surgical skills and knowledge.

9. Teaching and Learning Strategies

Organized Educational Content: the units of the program are presented in a structured manner, starting from basic concepts to advanced topics. Use timelines and study plans to help students understand the sequencing and priorities.
Use Diverse Teaching Media: Provide multimedia lectures, interactive presentations, educational videos, and illustrative diagrams to enhance student understanding and engagement.
Facilitate Dialogue and Discussion: Encourage students to participate in ongoing discussions about clinical cases, different surgical challenges, and recent academic research in Oral Surgery. Use current studies and real-life cases as

tools for interactive learning.
Hands-on Training: Offer extensive practical learning opportunities in teaching dental hospital settings to practice basic and advanced surgical procedures under direct supervision.
Regular Assessment: Provide mechanisms for effective and regular assessment of student understanding and progress.
Continuous Curriculum Updates: periodic review and updates of the study materials.
Self-directed Learning and Additional Resources: Encourage students to engage in self-directed research and explore academic sources and peer-reviewed scientific articles related to Oral Surgery through a weekly presentation of the subject content by the students.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	1	Cardiovascular diseases Hypertension Dental management Oral Manifestations Ischemic heart diseases Angina pectoris Myocardial infarction (MI) Dental management Heart failure Dental management Oral manifestations	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirements evaluation + Quiz.
2	1	Cardiac arrhythmia Dental management Infective endocarditis Dental management Rheumatic fever and rheumatic heart Disease Dental management Congenital heart disease Dental management Oral manifestations	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirements evaluation + Quiz.
3	1	Bleeding disorder Dental management of the patient with bleeding disorder: Hemophilia Von Willebrand's disease Thrombocytopenia Blood dyscrasias Disorders of the RBCs Anemia and polycythemia Dental management WBCs Disorders Leukemia, Lymphoma, Burkitt's Lymphoma and Multiple Myloma Dental management	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirements evaluation + Quiz.
4	1	Endocrinology Thyroid diseases Dental management of hyper- and hypothyroidism Oral complications and manifestations Adrenal insufficiency Dental management of Adrenocortical insufficiency and adrenal crisis Dental management of Adrenocortical hyperfunction Oral complications and manifestations Diabetes Mellitus Dental management of the patient with diabetes mellitus	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirements evaluation + Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
5	1	Pulmonary diseases Chronic obstructive pulmonary diseases (COPD) Dental management Oral complications and manifestations Asthma Dental management Management of asthmatic attack Oral complications and manifestations Tuberculosis Dental management Oral complications and manifestations	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
6	1	Liver Diseases Viral hepatitis Dental management Oral manifestations and complications Alcoholic liver disease Dental management Oral complications and manifestations	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
7	1	Chronic kidney disease and dialysis Chronic kidney disease Dental management Patients receiving conservative care Dialysis Renal transplant Oral complications and manifestations	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
8	1	Neurologic disorders Epilepsy Dental management Oral complications and manifestations Cerebrovascular accidents (stroke) Medical management Dental management	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
9	1	Pregnancy Dental management Medical considerations Treatment timing Dental radiographs Drugs in pregnancy Oral manifestations and complications	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
10	1	AIDS and HIV infection Oral manifestations Dental management: Asymptomatic patient. Symptomatic patient. Patient with severe symptoms	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
11	1	Rheumatologic and connective tissue disorders Rheumatoid arthritis Dental management Oral manifestations and complications Dental management of patients with prosthetic joint	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
12	1	Allergy Dental management Oral complications and manifestations	Oral Surgery	Theoretical lecture using PowerPoint presentation. .	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
13	1	Patients on radiotherapy and chemotherapy Patients on radiotherapy Radiation effects on normal tissues in the path of the external beam Dental Management Patients on chemotherapy The effect of chemotherapy on normal tissues Dental management	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
14+15 +16	3	Odontogenic infections and fascial space infections Odontogenic Infections Spread of odontogenic infections The factors that influence the spread of odontogenic infections Fascial space infections Infection of spaces in relation to the lower jaw Infections of spaces in relation to the upper jaw Cavernous sinus thrombosis Principles of treatment of odontogenic infections Principles for the use of appropriate antibiotics Sinus formation Necrotizing fasciitis	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
17+18	2	Principles of Flaps, suturing and management of difficult extraction Flaps in oral cavity Incision Flap design Types of Mucoperiosteal Flaps Flap reflection Suturing Suture Materials Needles Needle Holder Tissue Forceps Suture Scissor Principles of suturing Suturing Techniques Management of difficult extraction The main indications for surgical extraction of teeth are Steps of surgical extraction Indications for leaving root fragments Multiple Extractions Extraction sequencing	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
19+20 +21	3	Principles of management of impacted teeth Definition and stages of eruption Impacted lower third molars Indications for removal of impacted lower third molars Classification of impacted lower third molars Clinical examination Radiographic examination and assessment Surgical extraction of lower third molar Complications Other lines of treatment Impacted upper third molars Surgical extraction Complications Impacted maxillary canine Classification Clinical examination Radiographic examination and assessment Options of treatment Impacted mandibular canines Impacted lower premolars Impacted maxillary premolars Impacted first and second molars Buried deciduous molars Supernumerary teeth Dilacerated incisors	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
22	1	Surgical aids to orthodontics Corticotomy assisted orthodontic treatment and labial Labial frenectomy. Temporary skeletal anchorage	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
23+24	2	Principles of endodontic surgery Definition Indications for periapical surgery Contraindications for periapical surgery Important considerations in periapical surgery Factors Associated with Success and Failures in Periapical Surgery Surgical procedure To perform biopsy or not Determination of success Microsurgical technique	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
25+26	2	Osteomyelitis and osteonecrosis of the jaw Osteomyelitis Definition. Classification Etiology and pathogenesis Clinical presentation Diagnostic imaging Microbiology Treatment: surgical, antimicrobial and hyperbaric oxygen Other types of osteomyelitis: infantile, focal and diffuse sclerosing and Garre's sclerosing osteomyelitis Radiation induced osteomyelitis and osteoradionecrosis Definition Etiology Stages Treatment Prevention Medication related osteonecrosis of the jaw Definition Pathophysiology Clinical presentation and staging Imaging Treatment Prevention	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
27+28	2	Dental Implants: Basic Concepts and Techniques Implant Geometry (Macrodesign) Implant Surface Characteristics (Microdesign) Hard Tissue Interface Soft Tissue–Implant Interface Biomechanical Considerations Preoperative Assessment and Treatment Planning (hard tissue evaluation, soft tissue evaluation, radiographic examination) Surgical Treatment Planning Considerations Final Treatment Planning Basic Implant Surgical Procedures One-Stage versus Two-Stage Implant Placement Surgery Implant Stability Complications Implant Components Defining implant outcomes	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.
29	1	Biopsy in oral and maxillofacial surgery Medical History History of the lesion Examination Differential Diagnosis Biopsy Principles Contraindication Excisional Biopsy Incisional Biopsy Surgical technique	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
30	1	Diagnostic imaging in oral and maxillofacial surgery Classification: Invasive and Non-invasive Types of non-invasive imaging Conventional radiography (Plain x-ray) Ultrasonography (USG): Computed tomography scanning (CT scan): Spiral CT, Cone Beam CT (CBCT) Magnetic resonance imaging (MRI) MRI vs. CT scan Radionuclide (scintigraphy or skeletal scan) Positron emission tomography (PET) Scan PET-CT Single Photon Emission Computed Tomography (SPECT) scan	Oral Surgery	Theoretical lecture using PowerPoint presentation.	Daily, monthly, semi-annual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	10% (10% 1st and 2nd Semesters Exam)	15% (2%Weekly Quizzes) (3%Seminar) (10%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	35% (Written Exam)	25% (Clinical Exam)	60%
Total	60%	40%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Excellent

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks & Main Reference: 1. Dental management of medically compromised patients 10th edition 2024. 2. Contemporary oral and maxillofacial surgery 7th edition 2019. 3. Misch's contemporary implant dentistry, fourth edition 2021.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Tooth extractions: 20-30 cases (including simple and impacted teeth, such as third molars).
Minor surgical procedures: 5-10 cases (e.g., biopsies, cyst removals, soft tissue surgeries).
Post-operative care and follow-up (10-15 cases).
Involvement in handling dental trauma cases, such as avulsed or fractured teeth (5-7 cases).

Course Description Form

TUD404 - Conservative Dentistry and Endodontics (Fourth Year)

1. Course Name:	Conservative Dentistry and Endodontics
2. Course Code:	TUD404
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 6 hour/week; Total annual contact hours: 210; Total units: 8 (Theory units: 2; Practical/Clinical units: 6).
7. Course administrator's name (mention all, if more than one name)	Prof. Dr. Mohammed Rasheed Hameed Mohammedrasheed@codental.uobaghdad.edu.iq

Supplementary Course Description

The Conservative Dentistry and Endodontics course for fourth-year students focuses on restoration of carious teeth and management of root canal therapy. Students learn cavity preparation, restorative materials, and procedures including direct restorations, inlays, onlays, and root canal treatment. Clinical training emphasizes aesthetic restorative care and effective endodontic treatment to support safe, patient-centered outcomes.

8. Course Objectives

To provide dental students with thorough knowledge about the methods of performing dental examination and diagnosis. In addition, to have a knowledge and comprehension about the treatment of affected area and prevent further disease and to use and apply their knowledge comprehension and skill in their real life to be efficient dentist for serving their society in the field of dentistry. In this course the students will be provided with clinical training in the disciplines of Restorative Dentistry (Operative) and laboratory training in endodontic. Students undergo clinical training in dental clinic on patients under supervision. Also this course is to train students on identification, handling of instruments used in Restorative Dentistry , provide them with thorough knowledge of principles of cavity preparations and filling of amalgam and composite restorations , study the basic principles of tooth preparation for the different types of dental filling and to teach the students physiology and pathology of the dental pulp and the diagnosis and treatment of dental pathologies and different steps in endodontic procedure by performing standardized exercises using extracted teeth and train the students to evaluate their own mistakes and improve their skills.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:

1. Lectures

Purpose: To provide foundational knowledge and an overview of biological concepts.

Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance understanding.

3. Laboratory and clinical work:

Purpose: Enhance student ability to manipulate the dental chair .

Approach: Allows the student to master Root canal and operative work on human and extracted teeth

A-Knowledge and Understanding

A1.A thorough knowledge about the methods of performing dental examination and diagnosis

A2.Special emphasis on clinical steps for treatment of dental caries with different types of dental fillings materials.

A3. A thorough knowledge of endodontic treatment procedural steps.

A4.understanding the uses of different instruments used in endodontic and restorative dentistry.

B. Subject-specific skills
B1. Provide the student with skills of using different dental instruments used in endodontic and restorative dentistry.
B2.provide the students with skills of doing endodontic treatment on extracted teeth.
B3.enable the students of clinical work by preparing dental cavities and making dental fillings on real patients.

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
-	-	Not specified in the 2025-2026 course syllabus.	Not separately specified in the 2025-2026 course specification.	Not separately specified in the 2025-2026 course specification.	Not separately specified in the 2025-2026 course specification.

11. Course Evaluation

The detailed 100-point distribution is not separately stated in the 2025-2026 course specification. Course assessment is implemented in accordance with College and University examination regulations.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Not separately specified in the 2025-2026 course specification.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Restorative Procedures:
Composite fillings (anterior and posterior teeth): 20-30 cases.
Indirect restorations (inlays, onlays): 5-10 cases.

Endodontics:
Root canal treatments: 15-20 cases (including anterior and posterior teeth).
Pulp capping and vital pulp therapy: 5-7 cases.
Endodontic re-treatments: 3-5 cases.

Course Description Form

TUD405 - Oral Pathology (Fourth Year)

1. Course Name:	Oral Pathology
2. Course Code:	TUD405
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	05-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 2 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 120; Total units: 6 (Theory units: 4; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Prof. Taghreed Fadhil Zaidan Email: - tagreed.fadil@uoturath.edu.iq Lec. Abeer Salah Salman Email: - abeer.salah@uoturath.edu.iq

Supplementary Course Description

The course provides an overview of oral pathological diseases , Enable the students to provide the diagnose and the treatment of various general diseases of the body, teaching students to use optical microscopy and how to diagnose the pathological tissue, as well as to distinguish between the normal and pathological tissues. In addition, enable the students to understand both clinical diagnoses and histopathological diagnosis, and understand the knowledge of to different characteristics of each disease through clinical and histopathological tissue diagnosis.

8. Course Objectives

Student Learning Outcomes (SLOs) for 4th-Year Undergraduate Students in oral Pathology
Upon successful completion of the oral Pathology course, students will be able to:
1. learn and understand the oral pathology science and histopathological diagnostic methods.
2. Introduce students to the normal morphology of oral histology
3. Identify the etiology and pathogenesis of common diseases associated with oral cavity .
4. Differentiate between normal and pathological findings in histological and gross specimens.
5. Correlate pathological findings with clinical presentations and laboratory investigations.
Skills:
6. Enabling students to acquire work skills in medical laboratories
7. Enabling students to acquire the skills to diagnose diseases clinically and to read pathological sections at the tissue level.
8. Enabling students to acquire appropriate decision-making skills for the pathological oral conditions.
9.Training students to acquire the skills of a scientific research.

9. Teaching and Learning Strategies

1. Lecture:
Lectures usually begin with a brief review of the previous topic and then move into the topic with presentations, student discussion, and quizzes during the lectures.
Purpose: Use of multimedia presentations, detailed diagrams and a presentation of medical cases related to the subject.
2. Laboratory work:
Microscopy Practical: Students participate in viewing light microscopes and how to diagnose diseases, discussion and dialogue about vocabulary related to the topic.
Demonstrations: Showcase autopsy findings, tissue samples, or models to bridge theoretical knowledge with clinical

application.
3. Case-Based Learning:
Interactive discussions are held with students during the practical laboratory regarding the diagnosis of diseases and the presentation of disease causes related to the lecture topic, in which all clinical symptoms, laboratory and histological test are referred to in order to reach a diagnosis and how to deal with them.
4. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	1- Biopsy (Principles and techniques Introduction to Biopsy and its types ,lab procedures	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, semiannual and final exams. Practical exam + Quiz.
2	(1) theory (2) clinical	2- Healing of Oral wounds Causes, stages, factors that affect wound healing	Oral pathology	Theoretical lecture using PowerPoint presentation. + Practical work.	Daily, monthly, Semiannual and final exams. Practical exam + Quiz.
3	(1) theory (2) clinical	3- Dental caries Microscopic findings of dental caries (enamel, dentin, cementum)	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam + Quiz.
4	(1) theory (2) clinical	4- Disorders of the dental pulp (pulp diseases, Pulpitis) Microscopic findings of all pulpal inflammatory diseases	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam + Quiz.
5	(1) theory (2) clinical	5- Periapical pathology Microscopic findings of different types of periapical lesions	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
6	(1) theory (2) clinical	6- inflammatory diseases of the bone Microscopic findings of different types of inflammatory diseases of the bone	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
7	(1) theory (2) clinical	7- Developmental Diorders of Teeth. Clinical and microscopic findings of Developmental Disorders of Teeth.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
8	(1) theory (2) clinical	8- Developmental Disorders of Soft and Hard Tissues Clinical and microscopic findings of Developmental Disorders of Soft and Hard Tissues.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
9	(1) theory (2) clinical	9- Non-Odontogenic Cyst. Microscopic findings of Non-Odontogenic Cyst	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
10	(1) theory (2) clinical	10- Odontogenic cysts. Microscopic findings of Odontogenic cysts	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
11	(1) theory (2) clinical	11- Odontogenic Tumors 1. Microscopic picture of epithelial odontogenic tumors	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
12	(1) theory (2) clinical	12- Odontogenic Tumors 2. Microscopic findings of mesenchymal origin (ex.myxoma) and mixed origin (odontoma and other examples.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
13	(1) theory (2) clinical	13- Benign Epithelial Lesions associated with human papilloma virus. Microscopic findings of benign Epithelial Lesions	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
14	(1) theory (2) clinical	14- Epithelial Hyperplasia, atrophy and dysplasia. Microscopic features of dysplasia and leukoplakia ,erythroplakia , carcinoma in situ, verruca leukoplakia	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
15	(1) theory (2) clinical	15- squamous cell carcinoma. Microscopic findings of all grading of squamous cell carcinoma.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
16	(1) theory (2) clinical	16- Fibro-osseous lesions, metabolic and genetic conditions of the bone. clinical and radiographical and histopathological features lesions, metabolic and genetic conditions of the bone.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
17	(1) theory (2) clinical	17- Giant cell lesions Types of Giant cell lesions and their microscopic features	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
18	(1) theory (2) clinical	18- Benign tumors of the bone clinical, radiograph, histological findings of benign tumors of the bone.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
19	(1) theory (2) clinical	19- Malignant tumors of the bone clinical, radiographical, histological findings of malignant tumors of the bone disorders.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
20	(1) theory (2) clinical	20- Viral infections different types of viral infection	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
21	(1) theory (2) clinical	21- Bacterial and fungal infections different types of Bacterial and fungal infections	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
22	(1) theory (2) clinical	22- Immune mediated disorders 1 Microscopic pictures of lichen planus and other types of immune mediated disorders	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
23	(1) theory (2) clinical	23- Immune mediated disorders 2 Microscopic findings of all types of pemphigus	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
24	(1) theory (2) clinical	24- Connective tissue lesions 1 Microscopic View of Connective tissue lesions (fibrous tissue (Hyperplastic lesions, Focal fibrous hyperplasia, Denture-induced fibrous hyperplasia,…)	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
25	(1) theory (2) clinical	25- Connective tissue lesions 2 Microscopic view of vascular lesions (benign, Malignant).	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
26	(1) theory (2) clinical	26- Salivary gland disorders. viral diseases and reactive lesions affect the salivary glands.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
27	(1) theory (2) clinical	27- Salivary gland neoplasms. microscopic findings of benign and malignant tumors of salivary glands (major and minor	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
28	(1) theory (2) clinical	28- Physical and chemical injuries Different types of Physical and chemical injuries	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
29	(1) theory (2) clinical	29- Hematopoietic tumors Different types of Hematopoietic tumors.	Pathology Unit	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.
30	(1) theory (2) clinical	30- Forensic dentistry overview of what this topic is and the extent of its impact on dentistry.	Oral pathology	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, Semiannual and final exams. Practical exam +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Oral and maxillofacial pathology. Brad Neville, Douglas Damm Carl Allen and Jerry Bouquot. 5th edition. 2021, Electronic references or websites: Google scholar Recommended books and references: Journals Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology

	Robinson, Max, Keith Hunter, Michael Pemberton, and Philip Sloan. Soames'& Southam's Oral Pathology. 2018, Oxford University Press.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Diagnosis and management of oral lesions: 10-15 cases.
Biopsy procedures: 3-5 cases (both soft tissue and hard tissue).
Collaboration with oral surgeons and pathologists in diagnosing pathological conditions.

Course Description Form

TUD406 - Orthodontics (Fourth Year)

1. Course Name:	Orthodontics
2. Course Code:	TUD406
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 4 hour/week; Total annual contact hours: 150; Total units: 6 (Theory units: 2; Practical/Clinical units: 4).
7. Course administrator's name (mention all, if more than one name)	Ass. Lect. Thamer Hani Abd Al-Hussien Al-Saffar. Email: - thamer.hani@uoturath.edu.iq Lect. Dhuha abd Al-Bqader Abd Al-Hhussein. Email: - Dhuha11_1aba@yahoo.com Ass. Lect. Maryam Salman. Email: - maryam.salman@uoturath.edu.iq

Supplementary Course Description

The course provides an overview of orthodontic fundamentals, enables students to effectively diagnose the patients' orthodontic problems, and equips students with the knowledge and skills to put a treatment plan to solve such problems. In addition, the course explains the significance of the practical part of the course. This includes the types of removable appliances, and their components. Throughout both classroom and orthodontic laboratory attendance.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of orthodontic principles relevant to patients' abnormalities.
2- Able to identify different types of orthodontic appliances and apply appropriate techniques for optimal devices that can solve the problem.
3- Apply theoretical knowledge in a practical setting during orthodontic clinics, enhancing their clinical competencies in the next fifth grade.
4- Assess and, recognizing factors that contribute to achieve the diagnostic and treatment plan utility.
5- Effectively identify normal anatomical structures, pathologies, and diseases in the maxillofacial region.
6- Apply self-education to prevent bad oral habits and the safety protective measures for the patients themselves and

patients in clinical settings.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:

1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Orthodontic labs: Training in lab for construction of removable orthodontic appliance

Purpose: Enhance student ability to manipulate the appliances as a Practice and the theoretical techniques and acquire the necessary clinical skills to operate and use theses orthodontic devices.

Approach: Allows the student to master orthodontic demands according to patients willing.

6. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	1- Introduction Definition of orthodontics Definition of occlusion, normal occlusion, ideal occlusion and malocclusion Six keys of normal occlusion. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) clinical	2- Aims of orthodontic treatment Orthodontic definitions (overjet, overbite, crossbite, spacing, crowding, midline deviation, rotation, displacement, proclination, retroclination, protrusion, retrusion, imbrication, overlap, impaction) including types. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) clinical	3- Classification of malocclusion a. Angle's classification including divis and subdivisions.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) clinical	4- b. molar, anine, incisor classifications c. classification of deciduous and mix dentitions.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) clinical	5- Definitions of growth, development and maturity Stages of development (ovum till birth) Theories of bone growth (cartiligeneous, sutural, endosteal-periosteal, matrix theories). Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
6	(1) theory (2) clinical	6- Definitions of growth site, growth center, displacement, and drift Growth curve and maximum growth spurt. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (2) clinical	7- Growth and development of hard tissues (cranial base, cranial vault, nasomaxillary complex, mandible) including prenatal and postnatal Growth and development of soft tissues (lip, nose, cheek and tongue) including prenatal and postnatal. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) clinical	8- Developmental anomalies Jaw rotation and adaptation. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	9- Deciduous and permanent dentition Stages of tooth development: Formation, calcification and root completion. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) clinical	10- Tooth eruption (stages and theories) Sequences and timing of eruption. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (2) clinical	11- Development of occlusion newborn oral cavity (relationship of gum pads, neonatal jaw relationships, natal and neonatal teeth) Deciduous dentition stage - Dental changes till 6 years of age (jaw relationship, attrition, primary spaces. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	12- c-Early mixed dentition stage - eruption of first molars and incisors (occlusal relationships of primary and permanent molars, early mesial shift, ugly duckling stage, secondary spaces) d. Late mixed dentition stage - eruption of canines and premolars (Leeway space and late mesial shift) permanent dentition - eruption second and third molars (mesial migration). Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
13	(1) theory (2) clinical	13- Etiology of malocclusion: Genetic factors and inherited factors Classification of etiological factors a. General factors i. Skeletal (dental base and cranial base, variation of position and size of the jaws). Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (2) clinical	14- Soft tissue (muscles of face and mastication, muscles of lip and tongue, relation to skeletal factors, abnormalities of Oro-facial musculature, interference with soft tissue function) iii. Tooth size and arch length relationship (Crowding and spacing) including types. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	15- Local factor i-Extra-teeth (supernumerary) and missing teeth (hypodontia) ii. Anomalies of tooth size and shape. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) clinical	16- iii- Early loss of deciduous teeth iv. Retained deciduous teeth, delayed eruption of permanent teeth, impacted teeth, ankylosis. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) clinical	17- Abnormal eruptive behavior (displacement, transposition) vi. Large frenum (labial and lingual), periodontal diseases. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) clinical	18- Oral habit Dental caries, improper dental restoration. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) clinical	19- Tooth movement a. Tissue changes associated with tooth movement: Histology of periodontium Theories of tooth movement (pressure tension theory, blood flow theory, and piezoelectric theory). Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	20- b. Biomechanics Force (application, type, magnitude, duration and direction) Center of resistance and rotation, moment of force and moment of couple. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
21	(1) theory (2) clinical	21- Types of tooth movement Rate of tooth movement and factors affecting it. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	22- Orthodontic appliances. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	23- b. Removable Orthodontic Appliance: Properties of various components (SS wire, acrylic) Components: 1) active components (springs, screws and elastics). Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	24- Retentive components (clasps) acrylic base plate and bite planes anchorage. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) clinical	25- Design of a removable orthodontic appliance Construction of a removable orthodontic appliance. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	26- V. Soldering and welding vi. post-insertion instructions and guidelines. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	27- Fixed orthodontic appliance: Types, components, advantages, limitation, biomechanics, banding vs. bonding. Clinical work.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	28- Use of extra-oral anchorage, temporary anchorage devices (TADs), and lingual fixed appliance. Oral assessment.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (2) clinical	29- Orthopedic and Myofunctional appliance. Oral assessment.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) clinical	30- Retention and retainers. Final Practical exam.	Orthodontic	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%

	Theory	Practical	Total
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: 1.Contemporary orthodontics 7th Edition 2023 William R. Proffit, Henry W. Fields, Brent Larson, and David M. Sarver 3. Orthodontics; current principles and technique 6th Edition 2016 Lee W. Graber, Robert L. Vanarsdall Jr., Katherine W. L. Vig, and Greg J. Huang 4. Introduction to orthodontics 5th Edition 2018 Laura Mitchell Recommended Reference: 1. Deicke, M, Pancherz, H: Is radius-union an indicator for completed facial growth? Angle Orthod. 75, 2005, 295–299. 2. Ker, AJ, Chan, R, Fields, HW, et al.: Esthetic and smile characteristics from the layperson's perspective: a computer-based survey study. J Am Dent Assoc. 139, 2008, 1318–1327. 3. Kantor, ML, Norton, LA: Normal radiographic anatomy and common anomalies seen in cephalometric films. Am J Orthod Dentofac Orthop. 91, 1987, 414–426. Electronic references or websites: American Academy of Orthodontics Dentistry https://www.aapd.org/ The International Association of Dental Traumatology (IADT).
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Fixed Appliances:
Placement and adjustments of braces: 10-15 cases (both partial and full treatments).

Removable Appliances:
Fabrication and adjustment of removable orthodontic devices: 5-10 cases.

Orthodontic Assessment:
Diagnostic assessments, including cephalometric analysis and treatment planning: 15-20 cases.

Retention:
Retainer design and follow-up care: 5-7 cases

Course Description Form

TUD407 - Pedodontics (Fourth Year)

1. Course Name:	Pedodontics
2. Course Code:	TUD407
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 2 hour/week; Total annual contact hours: 90; Total units: 4 (Theory units: 2; Practical/Clinical units: 2).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Sama AL.Ani

Supplementary Course Description

focuses on the diagnosis, prevention, and treatment of dental conditions in children. Students will learn techniques for managing pediatric dental care, including restorative procedures, behavior management, and space maintainers. Clinical training will cover treatments like fillings, pulp therapy, and managing dental trauma in children.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1. Diagnostic Skills: Develop proficiency in diagnosing oral diseases and conditions, including dental caries, periodontal disease, and oral cancer.
2. infection control: how to apply the infection control and how to manage protective equipment in dental clinic.
3. apply teeth numbering system.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of biological concepts.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance understanding.
2. Laboratory work:
Purpose: Enhance student ability to manipulate dental chairs and apply infection control.
Approach: Allows the student to diagnose dental caries for primary and permanent teeth
4. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	1	Aligned with the stated course learning outcomes.	Eruption of Teeth, Normal Eruption Process	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
2	1	Aligned with the stated course learning outcomes.	Teething and Difficult Eruption	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
3	1	Aligned with the stated course learning outcomes.	Eruption Hematoma, Sequestrum, Ectopic Eruption	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
4	1	Aligned with the stated course learning outcomes.	Epstein Pearls, Bohn Nodules, Dental Lamina Cysts, Shedding of Primary Teeth, Mechanism of Resorption and Shedding	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
5	1	Aligned with the stated course learning outcomes.	Factors Causing Differences in Time of Eruption	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
6	1	Aligned with the stated course learning outcomes.	Systemic (Disease) Factors Which Cause Late Eruption (Deciduous Dentition Period, Ugly Duckling Stage)	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
7	1	Aligned with the stated course learning outcomes.	Morphology of the Primary Teeth	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
8	1	Aligned with the stated course learning outcomes.	Normal Morphology of All Primary Teeth and Their Clinical Consideration	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
9	1	Aligned with the stated course learning outcomes.	Morphological Differences Between Primary and Permanent Teeth	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
10	1	Aligned with the stated course learning outcomes.	Functions of Primary Teeth	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
11	1	Aligned with the stated course learning outcomes.	Dental Caries: Definition and Classification	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
12	1	Aligned with the stated course learning outcomes.	Rampant Dental Caries, Early Childhood Caries	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
13	1	Aligned with the stated course learning outcomes.	Restorative Dentistry for Children: Isolation & Maintenance of Dry Field and Application of Rubber Dam	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
14	1	Aligned with the stated course learning outcomes.	Morphological Considerations, Cavity Preparation on Primary Teeth	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
15	1	Aligned with the stated course learning outcomes.	Restorative Materials Used in Pediatric Dentistry	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
16	1	Aligned with the stated course learning outcomes.	Matrices & Retainers	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
17	1	Aligned with the stated course learning outcomes.	Chrome Steel Crowns, ART	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
18	1	Aligned with the stated course learning outcomes.	Treatment of Deep Caries	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
19	1	Aligned with the stated course learning outcomes.	Indirect Pulp Treatment	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
20	1	Aligned with the stated course learning outcomes.	Vital Pulp Therapy: Pulpotomy	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
21	1	Aligned with the stated course learning outcomes.	Non-Vital Pulp Therapy Techniques	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
22	1	Aligned with the stated course learning outcomes.	Reaction of Pulp to Various Capping Materials	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
23	1	Aligned with the stated course learning outcomes.	Local Anesthesia and Pain Control for Children	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
24	1	Aligned with the stated course learning outcomes.	Types of Space Maintainers (Indications and Contraindications)	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
25	1	Aligned with the stated course learning outcomes.	Anesthetizing Mandibular and Maxillary Teeth and Soft Tissue	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
26	1	Aligned with the stated course learning outcomes.	Complications After a Local Anesthetic	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
27	1	Aligned with the stated course learning outcomes.	Supplemental Injection Techniques	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
28	1	Aligned with the stated course learning outcomes.	Oral Surgery for Children: Indications and Contraindications for Extraction of Primary Teeth	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
29	1	Aligned with the stated course learning outcomes.	Techniques for Extraction of Primary Teeth	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
30	1	Aligned with the stated course learning outcomes.	Extraction Complications	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
31	1	Aligned with the stated course learning outcomes.	Postoperative Extraction Complications, Radiographic Survey of Teeth Extracted	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
32	1	Aligned with the stated course learning outcomes.	Infections: Manifestation and Management	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Not separately specified in the 2025-2026 course specification.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Restorative Procedures:
Fillings and crowns on primary teeth: 15-20 cases.

Preventive Care:
Fluoride treatments, sealants, and oral hygiene education: 30-40 cases.

Pediatric Trauma:
Dental trauma management (tooth avulsion, fractures): 5-7 cases.

Extractions and Space Maintainers:
Primary tooth extractions and space maintainers: 10-15 cases.

Course Description Form

TUD408 - Periodontics (Fourth Year)

1. Course Name:	Periodontics
2. Course Code:	TUD408
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 3 hour/week; Total annual contact hours: 120; Total units: 5 (Theory units: 2; Practical/Clinical units: 3).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Raghad Fadhil Abbas Email: - raghadfadhil@turath.edu.iq

Supplementary Course Description

The course provides an overview on periodontics, enables students to effectively read and diagnose periodontal disease, and equips students with the knowledge and skills to treat patients correctly. In addition, the course explains the significance of periodontal therapy measures in the dental field. This includes patients' motivation instruction and scaling Throughout both classroom and periodontics clinic.

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of periodontal treatment principles relevant to dental surgery
2- Able to identify different types of periodontal problem and apply appropriate techniques for optimal treatment plan.
3- Apply theoretical knowledge in a practical setting during periodontics clinics, enhancing their clinical competencies.
4- Assess the quality of dental treatment, recognizing factors that contribute to diagnostic utility.
5- Effectively interpret periodontal cases to identify normal anatomical structures, pathologies, and diseases in periodontium.
6- Apply radiation safety protective measures for themselves and patients in clinical settings.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of periodontal tissue concepts.
Approach: Use of multimedia presentations, detailed diagrams, and clinical correlations to enhance understanding.
3. clinical work:
Purpose: Enhance student ability to manipulate the patients with periodontal disease.
Approach: Allows the student to master periodontal treatment.
4. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	Anatomy of periodontium Gingiva	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) clinical	Anatomy of periodontium periodontal ligament	periodontics	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) clinical	Anatomy of periodontium alveolar bone	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) clinical	Dental plaque	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) clinical	Pathogenesis of periodontal disease	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (2) clinical	Hypothesis of plaque development	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (2) clinical	Host-parasite interaction	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) clinical	Classification of periodontal disease	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	Classification of other conditions affecting periodontium.	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) clinical	Periodontitis, PDL and inflammatory diseases).	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (2) clinical	Instrument for periodontal therapy	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	Dental calculus	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (2) clinical	Dental stain	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (2) clinical	Risk factor for periodontal disease	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	Smoking and periodontal disease	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
16	(1) theory (2) clinical	Smoking and periodontal disease	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
17	(1) theory (2) clinical	Impact of periodontal infection on systemic health	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) clinical	Periodontal indices.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) clinical	Periodontal pocket	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	Treatment plan guideline	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) clinical	Self-performed subgingival biofilm control	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	Cause-related phase for periodontal therapy .	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	Corrective phase and surgical procedure .	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	Plaque control for periodontal patients	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) clinical	Halitosis	periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	Systemic anti microbial drug for periodontal disease	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	Histopathology of the periodontal pocket	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	Term frequently used in periodontium.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted

Student Grade	Grading system
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Newman and Carranza's Clinical Periodontology and Implantology 14th Edition 2023 Michael G. Newman, Perry R. Klokkevold, Satheesh Elangovan, Yvonne Kapila, Fermin A. Carranza, and Henry Takei Atlas of Cosmetic and Reconstructive Periodontal Surgery 3rd Edition 2007 Edward S. Cohen Electronic references or websites: PubMed
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Non-Surgical Therapy:
Scaling and root planning: 30-40 cases.

Periodontal Surgery:
Flap surgeries and bone grafts: 3-5 cases.

Maintenance Care:
Periodontal maintenance: 15-20 follow-up cases.

Advanced Periodontal Treatments:
Management of advanced periodontitis cases (including surgical and non-surgical therapies): 5-7 cases.

Course Description Form

TUD409 - Prosthodontics (Fourth Year)

1. Course Name:	Prosthodontics
2. Course Code:	TUD409
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 3 hour/week; Total annual contact hours: 120; Total units: 5 (Theory units: 2; Practical/Clinical units: 3).
7. Course administrator's name (mention all, if more than one name)	Lec, dr. Ali Nima Ahmad Hussain Email: Not stated in the 2025-2026 course specification

Supplementary Course Description

As descried above

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of removable partial denture principles relevant to dental use.
2- Able to identify different types of prosthesis and apply appropriate techniques for optimal result
3. Students will commence clinical training activities in removable prosthodontics
4- Effectively knowledge the basis for the study of prosthodontics relating to the diagnosis, treatment planning, rehabilitation and maintenance of the oral function, comfort, appearance and health of patients with clinical conditions associated with missing or deficient teeth and/or oral and maxillofacial tissues using biocompatible substitutes

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1 + 2	2	Anatomy and physiology as related to dental prosthesis	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
3 + 4	2	Diagnosis and treatment plan for RPD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
5 + 6	2	Preparation of the mouth to receive an RPD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
7 + 8	2	Classification of impression technique	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
9	1	Designing Support	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
10	1	Fitting the removable partial denture framework	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
11	1	Occlusal Relationship for Removable Partial Denture	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
12	1	Jaw relation in RPD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
13	1	Trial RPD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
14	1	Initial placement and adjustment of RPD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
15+16	2	Pre- prosthetic surgery	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
17 + 18	2	Diagnosis and treatment plan CD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
19	1	Impression in CD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
20	1	TMJ and mandibular movement.	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
21	1	Digital RPD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
22	1	Vertical jaw relation	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
23	1	Horizontal jaw relation (Centric occlusion)	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
24	1	Try in stage in CD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
25	1	Insertion of CD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
26	1	Adjustments of CD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
27	1	Post insertion complications in CD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
28	1	relining and rebasing of CD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
29	1	Repair of fractured RPD	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams
30	1	Esthetic denture materials	prosthodontic	Theoretical lecture	Daily, monthly, mid-year, and final exams

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Prosthodontic treatment for edentulous patients: Complete dentures and implant-supported prostheses.13th edition 2013 Mosby Zarb, Hobkirk, Eckert, Jacob et al. McCracken's removable partial prosthodontics, 13th edition 2016 by Elsevier, Inc.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Complete Dentures:
Fabrication and fitting of complete dentures: 5-7 cases.

Removable Partial Dentures:
Partial denture fabrication and fitting: 5-7 cases.

Fixed Prosthodontics:
Crown and bridge restorations: 5-10 cases.

Implants:
Implant restorations: 2-3 cases (implant-supported crowns and bridges).

Course Description Form

TUD501 - Conservative Dentistry (Fifth Year)

1. Course Name:	Conservative Dentistry
2. Course Code:	TUD501
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 6 hour/week; Total annual contact hours: 210; Total units: 8 (Theory units: 2; Practical/Clinical units: 6).
7. Course administrator's name (mention all, if more than one name)	Dr. Abd Al-Kareem Al-Azawei

Supplementary Course Description

The Conservation Dentistry course for fifth-year students focuses on advanced restorative techniques, emphasizing the preservation of natural tooth structure. Topics include caries diagnosis, tooth preparation, and the use of modern biomaterials like composite resins and ceramics. Students will gain practical experience in minimally invasive procedures and aesthetic restorations. The course integrates theoretical knowledge with hands-on clinical practice, preparing students for patient-centered care and evidence-based decision-making. Assessment includes written exams, practical skills evaluations, and case-based discussions.

8. Course Objectives

Upon completion of the Conservation Dentistry course, students will be able to diagnose and assess dental conditions, apply minimal intervention principles, and select appropriate restorative materials for optimal outcomes. They will perform advanced restorative procedures, incorporating aesthetic principles and evidence-based practices into treatment planning. Students will demonstrate proficiency in clinical settings, manage long-term outcomes of restorations, and educate patients on preventive care and maintenance

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college, enhance student ability to diagnose and treat the patients.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	1	Endodontic diagnosis	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
2	1	Pain control in endodontic.	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
3	1	Endodontic radiography	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
4	1	Intracanal instruments (1)	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
5	1	Intracanal instruments (2)	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
6	1	Preparation of RCS	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
7	1	Microbiology	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
8	1	Terminology & definition of fixed partial denture FPDs	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
9	1	Types of Fixed Bridge	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
10	1	RC filling materials	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
11	1	Obturation of RCS (1)	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
12	1	Obturation of RCS (2)	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
13	1	Endo. Emergency treatment	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
14	1	Endo-perio relations	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam
15	1	Restoration of endo. treated teeth	Conservative Dentistry	Lectures using power point	Written exam, quiz, mid-year exam, final exam

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Main books (sources) Cohen's Pathways of the pulp Contemporary Fixed Prosthodontic Fundamentals of Fixed Prosthodontics 4th Edition 2012, by Herbert T. Shillingburg Jr., David A. Sather
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements
Required Cases: Restorations: 20-25 anterior and posterior composite restorations. Endodontic Treatments: 10-15 root canal treatments (including both anterior and posterior teeth). Indirect Restorations: 5-10 crowns or bridges (including both single and multiple units).

Course Description Form

TUD502 - Oral Medicine (Fifth Year)

1. Course Name:	Oral Medicine
2. Course Code:	TUD502
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 4 hour/week; Total annual contact hours: 150; Total units: 6 (Theory units: 2; Practical/Clinical units: 4).
7. Course administrator's name (mention all, if more than one name)	Prof. Rajaa Hadi Al-Jubouri Email: - Rajaa.hadi@turath.edu.iq

Supplementary Course Description

designed to provide dental students with a comprehensive understanding of the diagnosis, prevention, and management of various oral and systemic diseases that affect the oral cavity. The course covers a wide range of topics, including the clinical examination of oral lesions, management of oral manifestations of systemic conditions, and the diagnosis and treatment of oral diseases such as infections, mucosal disorders, and oral cancer. Students also learn about the relationship between oral health and overall health, with a focus on integrating oral medicine with other branches of dentistry. The course emphasizes the importance of early diagnosis, prevention, and interdisciplinary management to ensure optimal patient care. Practical sessions and clinical exposure enhance students' ability to handle complex oral health cases and prepare them for real-world dental practice. By the end of the course, students are expected to be proficient in identifying and managing a wide range of oral health conditions, and to understand the role of oral medicine in maintaining overall health

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:

Students will be able to diagnose and manage a wide range of oral diseases, including those with systemic implications. They will understand the relationship between oral health and general health, as well as developing treatment plans for various oral conditions. Students will gain proficiency in clinical skills, such as oral examinations and diagnostic procedures, while working effectively in multidisciplinary teams. They will also apply pharmacological knowledge and engage in self-directed learning to stay current with advances in the field. Effective patient communication and critical thinking will be emphasized throughout the course.

9. Teaching and Learning Strategies

Designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are utilizes a blend of interactive lectures, clinical demonstrations, and hands-on practical sessions to teach students the diagnosis and management of oral diseases. Students gain real-world experience through clinical rotations and case discussions, while also engaging in problem-based learning and peer learning. The course emphasizes multidisciplinary collaboration and integrates modern technology to enhance learning. Regular assessments and feedback help refine clinical skills and theoretical understanding. In addition to the added Critical thinking and problem solving engaging:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (4) clinical	1- The principles of oral diagnosis Clinical examinations. Laboratory investigations in dentistry.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (4) clinical	2- The principles of oral diagnosis Clinical examinations. Viral infection.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar+ clinic.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (4) clinical	3- Laboratory investigations in dentistry Bacterial infection.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (4) clinical	4- Laboratory investigations in dentistry. Fungal infection.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (4) clinical	5- orofacial pain. Diseases of the Respiratory tract.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (4) clinical	6- orofacial pain. Diseases of the cardiovascular system.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (4) clinical	7- T.M.J. Anatomical Landmarks of mandible.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (4) clinical	8- T.M.J. Renal diseases.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (4) clinical	9- Oral ulceration and Vesiculobullous lesions. Anemia.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (4) clinical	10- Oral ulceration and Vesiculobullous lesions. Common disease (caries, PDL and inflammatory diseases).	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (4) clinical	11- Oral ulceration and Vesiculobullous lesions Bleeding and clotting disorders.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (4) clinical	12- White & red lesions. Immunologic diseases.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (4) clinical	13- White & red lesions). Diseases of the thyroid gland.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (4) clinical	14- Early detection of oral Cancer. Diabetes mellitus.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (4) clinical	15- Early detection of oral Cancer. Orofacial pain and common headache disorders.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
16	(1) theory (4) clinical	16- Pigmented oral lesions. Neuromuscular diseases.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (4) clinical	17- Pigmented oral lesions Temporomandibular disorders.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (4) clinical	18- Benign, Premalignant and malignant lesions of the oral cavity. Salivary gland disorders.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (4) clinical	19- Benign, Premalignant and malignant lesions of the oral cavity. Drugs in dentistry.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (4) clinical	20- Benign, Premalignant and malignant lesions of the oral cavity. Drugs induced oral lesions.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (4) clinical	21- Benign, Premalignant and malignant lesions of the oral cavity. Panoramic image interpretation.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (4) clinical	22- Neuromuscular Disorder. Allergy.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (4) clinical	23- Neuromuscular Disorder. Ulcerative, vesicular, and bullous lesions.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (4) clinical	24- Salivary gland diseases. Red and white lesions of the oral mucosa.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (4) clinical	25- Salivary gland diseases. Pigmented lesions of the oral mucosa.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (4) clinical	26- Autoimmune diseases. Benign lesions of the oral cavity and the jaw.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (4) clinical	27- Autoimmune diseases. Oral and oropharyngeal cancer.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (4) clinical	28- Autoimmune diseases LASER in oral medicine.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (4) clinical	29- Oral manifestation of allergic reaction Geriatric oral medicine.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (4) clinical	30- Oral manifestation of allergic reaction Pediatric oral medicine.	Oral Medicine	Theoretical lecture using PowerPoint presentation. Seminar + clinic.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam)	10% (3%Weekly Quizzes) (2%Seminar)	25%

	Theory	Practical	Total
	(3% Student Attendee)	(5%Clinical Requirements)	
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Burket's Oral Medicine 13th Edition, published in 2021 by Wiley Electronic references or websites: https://radiopaedia.org/articles/periapical-radiolucency-teeth Recommended books and references: Journals Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology. TMJ disorders and orofacial pain. Fundamentals of oral Medicine.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Oral Mucosal Diseases: 10-15 cases of oral lesions (e.g., oral lichen planus, aphthous ulcers).
Oral Cancer Screenings: 5-10 comprehensive oral examinations for early detection.
Biopsy Cases: 3-5 biopsy procedures (both soft and hard tissue).

Course Description Form

TUD503 - Oral Surgery (Fifth Year)

1. Course Name:	Oral Surgery
2. Course Code:	TUD503
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 6 hour/week; Total annual contact hours: 210; Total units: 8 (Theory units: 2; Practical/Clinical units: 6).
7. Course administrator's name (mention all, if more than one name)	Lect. Salah Abdul-Mahdi Email: - salah.ismaeeel@turath.edu.iq

Supplementary Course Description

The Oral Surgery course focuses on advanced surgical procedures, including complex extractions, soft tissue surgeries, and bone grafting. Students will learn to diagnose and treat major oral pathologies like tumors and cysts. The course covers advanced anesthesia techniques, maxillofacial trauma management, and surgical complications. Practical experience through clinical rotations and case discussions enhances surgical skills. Assessment includes written exams, practical evaluations, and clinical performance.

8. Course Objectives

Upon completing the fifth-year Oral Surgery course, students will be able to:
Perform complex surgeries, like extractions and soft tissue procedures.
Diagnose and treat major oral pathologies, including tumors and cysts.
Safely administer advanced anesthesia techniques, including sedation.
Manage oral and maxillofacial trauma, such as fractures and facial injuries.
Address surgical complications and provide effective post-operative care.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory	Orofacial pain Classification; somatic and neuropathic Diagnosis Somatic pain; odontogenic pain, oral mucous membrane disorders, temporomandibular joint disorders, muscle disorders Neuropathic pain; trigeminal neuralgia, glossopharyngeal neuralgia, atypical odontalgia, postherpetic neuralgia Vascular pain; giant cell arteritis and migraine.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory	Fractures of the mandible Classification Clinical features Imaging Treatment; closed treatment, methods of immobilization, period of treatment, open reduction and internal fixation (ORIF) Teeth in the fracture line Complications	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory	Fractures of the mandible Classification Clinical features Imaging Treatment; closed treatment, methods of immobilization, period of treatment, open reduction and internal fixation (ORIF) Teeth in the fracture line Complications	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory	Fractures of the mandible Mandibular fractures that require special consideration: Pediatric fractures, Fractures of edentulous mandible Condylar fractures Comminuted fractures	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory	Fractures of the middle third of facial skeleton Classification, clinical presentation imaging and treatment of: Le Fort fractures Zygomatic complex fractures	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory	Fractures of the middle third of facial skeleton Classification, clinical presentation imaging and treatment of: Orbital floor fractures Nasal bone fractures Complications of fractures of middle third of facial skeleton	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
7	(1) theory	Dentoalveolar and soft tissue injuries Factors affecting dentoalveolar injuries Classification Clinical presentation Radiographic evaluation Treatment Splinting techniques Complications. Soft tissue injures; classification, treatment and soft tissue injuries of special significance	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory	Preprosthetic surgery Definition. Preoperative assessment Clinical examination and radiographic evaluation. Bony recontouring procedures: alveoloplasty, maxillary tuberosity reduction, exostoses and excessive undercuts, mylohyoid ridge and genial tubercle reduction and torus removal	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory	Preprosthetic surgery Soft tissue procedures: unsupported hypermobile tissue on the alveolar ridge, inflammatory fibrous hyperplasia (epulis fissuratum), labial frenectomy, lingual frenectomy, ridge extension (vestibuloplasty) Immediate dentures Alveolar ridge preservation Correction of abnormal ridge relationships	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory	Potentially malignant disorders of the oral mucosa Classification and terminology Risk factors, Diagnostic methods and diagnostic aids Potentially malignant disorders: leukoplakia, erythroplakia, palatal changes associated with reverse smoking, oral submucous fibrosis, actinic cheilitis and lichen planus.principles	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory	Odontogenic diseases of the maxillary sinus Overview of the maxillary sinus Clinical and radiographic examination Non-odontogenic infections of the maxillary sinus Odontogenic infections of the maxillary sinus Oroantral communications and fistulae Treatment	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
12	(1) theory	Benign cystic lesions of the oral cavity Definition Classification of cysts (according to the WHO classification 2017) Odontogenic cysts of inflammatory origin Odontogenic and non-odontogenic developmental cysts Clinical features Radiographic features Surgical management of cystic lesions Enucleation: indications, advantages and disadvantages Adjunctive treatment Peripheral ostectomy and curettage Cryotherapy Chemical treatment Topical 5-fluorouracil Marsupialization	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory	Odontogenic tumors Definition Classification of Odontogenic Tumors (according to the WHO classification of odontogenic cysts, tumors and maxillofacial bone tumors 2017) Epithelial odontogenic tumors Mixed epithelial and mesenchymal odontogenic	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory	Surgical burs and handpiece. Instruments to remove soft tissues from bony defects. Surgical curette. Non-odontogenic tumors and fibro-osseous lesions of the jaw Classification (according to the WHO classification of odontogenic and maxillofacial bone tumors 4th edition 2017) Giant cell lesions Central giant cell granuloma Brown tumor of hyperparathyroidism Cherubism	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory	Oral cancer Natural history of squamous cell carcinoma Etiology Site distribution Clinical presentation Staging (using the 8th edition of the cancer staging manual) and grading Radiographic assessment Surgical treatment, access to the oral cavity	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
16	(1) theory	Oral cancer Management of the neck Postoperative follow up Radiotherapy, radiotherapy techniques and fractionation Chemotherapy, agents and scheduling Palliative treatment and terminal care	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory	Implant Treatment: Advanced Concepts Immediate post-extraction implants Immediate loading versus delayed loading Bone grafts and graft substitutes Sinus lift procedure	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory	Implant Treatment: Advanced Concepts Inferior alveolar nerve lateralization Narrow and short implants	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory	Salivary gland diseases Overview of major and minor salivary glands Clinical assessment Imaging Classification: Developmental Inflammatory Obstructive and traumatic lesion Functional Autoimmune conditions Neoplastic lesions Inflammatory conditions (sialadenitis): Viral sialadenitis and Bacterial sialadenitis , Obstructive conditions Functional conditions: Xerostomia, Sialorrhea Conditions of possible traumatic origin: Mucocele, Ranula	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory	Salivary gland diseases Autoimmune conditions: Sjögren syndrome, Immunoglobulin G4-related salivary gland disease Other salivary gland conditions: Salivary duct cyst (Mucus retention cyst), Necrotizing sialometaplasia, Sarcoidosis, Sialadenosis (sialosis), Radioactive iodine sialadenitis Neoplasms: benign and malignant (according to 4th edition of the WHO classification 2017). Principles and complications of salivary gland surgery	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
21	(1) theory	Temporomandibular joint (TMJ) disorders TMJ anatomy Evaluation and Radiographic examination of the TMJ Disorders of the TMJ: Structural (internal derangement) Wilkes classification of internal derangement Functional (myofascial pain) Management: non-surgical, minimally invasive (arthocentesis and arthroscopy) and surgery	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory		Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory		Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory	Orthognathic surgery Mock surgery and fabrication of splints Surgical treatment phase (mandibular excess, mandibular deficiency, maxillary excess, Maxillary and Midface Deficiency) Distraction osteogenesis	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory	Cleft lip and palate Epidemiology Etiology Classification Prenatal diagnosis Clinical manifestations Management; presurgical orthopedics, primary operative management, treatment planning and timing, surgical procedures of cleft lip	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory	Cleft lip and palate Management; Surgical procedures of cleft palate, complications Secondary operative management; alveolar bone grafting, goals and timing, procedure, source of bone graft, complications.	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
27	(1) theory	Laser and Cryosurgery in oral and maxillofacial surgery Laser Classification of laser according to power: low-energy and high-energy The advantages of laser Hazards and precautions required when using laser Cryosurgery Cryosurgery techniques Uses of cryosurgery The advantages of using cryosurgery The disadvantages of using cryosurgery	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory	Vascular anomalies Classification (according to ISSVA 2018) Hemangioma Clinical presentation and staging Investigations Treatment In the proliferative phase In the involutive phase Residual lesions Vascular malformations Classification according to the vessel type and whether high or low flow Clinical presentation with emphasis on the intraosseous venous malformation Investigations Treatment	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory	Principles of reconstructive surgery of defects of the jaws Goals of reconstruction Biologic basis of bone reconstruction Types of grafts (autogenous, allogeneic, xenogeneic) Osteoinduction, Osteoconduction and Osteogenesis Assessment of patient in need for reconstruction Goals of mandibular reconstruction Defect types and localizations Mandibular reconstruction Surgical principles of maxillofacial bone grafting procedures	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
30	(1) theory	Principles of reconstructive surgery of defects of the jaws Maxillary reconstruction Goals of maxillary reconstructive surgery Computer-assisted surgical planning Flaps for maxillofacial reconstruction Definition Classifications Examples of flaps in maxilla-mandibular reconstruction (palatal flap, tongue flap, buccal fat pad flap, Facial Artery Musculomucosal Flap, Temporalis muscle flap, Submental Flap, Vascularized Iliac Crest Grafts	Oral surgery	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Text books: Contemporary Oral and Maxillofacial Surgery - 8th Edition (2020) Manual of Minor Oral Surgery for the General Dentist 2nd Edition 2015 Pushkar Mehra and Richard D'Innocenzo
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Tooth Extractions: 20-30 simple and impacted extractions (including third molars).
Minor Surgeries: 5-10 soft tissue biopsies and minor surgical procedures.
Postoperative Care: 10-15 post-op cases for recovery monitoring and pain management.

Course Description Form

TUD504 - Pediatric Dentistry (Fifth Year)

1. Course Name:	Pediatric Dentistry
2. Course Code:	TUD504
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 3 hour/week; Total annual contact hours: 120; Total units: 5 (Theory units: 2; Practical/Clinical units: 3).
7. Course administrator's name (mention all, if more than one name)	Prof. Dr. Baydaa Ali Othman baydaa.alrawi@ibnsina.edu.iq

Supplementary Course Description

Teaching how to carry out a diagnosis and treatment plan for pediatric patients. Learn radiological examination techniques and ways to reduce the effect of radiation on the child. The student learned how to treat deep caries, treat vital pulp, and pulp less teeth (endodontic treatments in children). The student will be able to know the differences between baby and permanent teeth, and the times of eruption of these teeth. Learn how to design space-preserving appliances after early extraction of baby teeth. The student must be able to treat patients with special needs. Teaching the student methods of administering anesthesia to children.

8. Course Objectives

Diagnosis and treatment plan for pediatric patients.
Radiological examination techniques and ways to reduce the effect of radiation on the child.
Treatment deep caries, treat vital pulp, and pulp less teeth (endodontic treatments in children)
Differentiate between baby and permanent teeth, and the times of eruption of these teeth.
Management of Dental trauma.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (3) clinical	1- Diagnosis and treatment planning. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
2	(1) theory (3) clinical	2- Preliminary medical and dental history. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (3) clinical	3- Art and science of behavior management. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (3) clinical	4- Non pharmacologic management of patient behavior. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (3) clinical	5- Pharmacologic management of patient behavior. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (3) clinical	6- Sedation in pediatric dentistry. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (3) clinical	7- management of traumatic injuries to the teeth and supporting tissues of children. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (3) clinical	8- Classification of injuries to the anterior teeth of children classification methods of clinical examination. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (3) clinical	9- Traumatic injuries of the primary teeth and its effect on permanent teeth. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (3) clinical	10- Treatment of injury of permanent teeth, emergency treatment, temporary restoration of traumatic teeth. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (3) clinical	11- Advances in Pediatric Dentistry: Advances in diagnostic aids, advances in cavity preparation methods. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (3) clinical	12- Advances in endodontics, Advances in local anesthesia. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (3) clinical	13- Advances in restorative materials, Advances in surgical procedures, miscellaneous. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (3) clinical	14- Acquired disturbances of oral structures. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (3) clinical	15- Developmental disturbances of oral structures. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
16	(1) theory (3) clinical	16- Gingivitis and periodontal disease in children. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (3) clinical	17- Acute candidacies (thrush), acute bacterial infection, chronic nonspecific gingivitis, gingival diseases modified by systemic factors. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (3) clinical	18-Gingival lesions of genetic origin, ascorbic acid deficiency gingivitis. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (3) clinical	19- Periodontal diseases in children, early onset periodontitis, prepubertal periodontitis, localized juvenile periodontitis. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (3) clinical	20- Papillon Lefever syndrome, gingival recession, extrinsic stains and deposits on teeth. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (3) clinical	21- Management of space problems, planning for space maintenance, loss of primary incisors. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory () clinical	22- Space Maintenance for the First and Second Primary Molar and the Primary Canine Area, premature loss of second primary molar. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	23-Loss of the Second Primary Molar Before Eruption of the First Permanent Molar, Areas of Multiple Primary Molar Loss. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	24- Development of dental arch and occlusion. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) clinical	25- Arch length analysis. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	26- Dental problems of the disabled child. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	27- Dental problems of the disabled child. Clinical work.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	28- Fragile X syndrome, cerebral palsy, autism. Oral assessment.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
29	(1) theory (2) clinical	29- Respiratory diseases, hearing loss, visual impairment, epilepsy. Oral assessment.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) clinical	30- Heart disease, hemophilia, sickle cell anemia, viral hepatitis, AIDS, children with systemic diseases. Final Practical exam.	Pediatric Dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: McDonald and Avery's Dentistry for the Child and Adolescent 11th Edition 2021 Handbook of Pediatric Dentistry 5th Edition 2021 Electronic references or websites: American Academy of Pediatric Dentistry https://www.aapd.org/ The International Association of Dental Traumatology (IADT). Recommended books and references: □□ Journal of Dentistry for Children. □□ Journal of Clinical Pediatric Dentistry. □□ International Journal of Pediatrics Dentistry. □□ European archives of pediatrics dentistry: official journal of the European Academy of Pediatrics Dentistry. □□ Journal of Dental Traumatology. □□ Pediatric Dental Journal. □ □Journal of Dentistry for Children.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements
Required Cases: Restorative Procedures: 10-15 restorative treatments (fillings, stainless steel crowns, pulpotomies). Preventive Care: 25-30 preventive procedures (fluoride applications, sealants). Pediatric Trauma: 5-7 cases of dental trauma (tooth avulsion, fractures). Behavior Management: 5-10 cases involving different behavior management techniques

Course Description Form

TUD505 - Prevention (Fifth Year)

1. Course Name:	Prevention
2. Course Code:	TUD505
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 3 hour/week; Total annual contact hours: 120; Total units: 5 (Theory units: 2; Practical/Clinical units: 3).
7. Course administrator's name (mention all, if more than one name)	Asst. Lec. Farah Alkzaz. Email: - farah.alaa@uoturath.edu.iq

Supplementary Course Description

The course provides an overview theoretically about preventive dentistry meaning, sections and its population based and personal applications. enables students to classify various dental health situations according to the four levels of prevention and provide them skills to deal with and treat each case efficiently and effectively in both clinic or population based methods.

8. Course Objectives

The student should achieve the following SLOs after completion of the course:
1- Students will be able to understand preventive dentistry goals, contents, and levels
2- Able to identify different dental and oral diseases or situations, habits that may lead to future dental and oral health problems and classify each case according to prevention levels
3- theoretical and clinical treatment for each level and case they faced in clinic
4- Assess the quality of dental treatment and prognosis
5- assess dietary habits, sweet consumption, and body mass index for each case and their outcomes in general and oral health
6- communication skills with different society and age segments and oral and dental problems that may face with each segment.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Lectures
Purpose: To provide foundational knowledge and an overview of preventive dentistry
Approach: Use of multimedia presentations, and clinical correlations to enhance understanding.
3. prevention Clinic:
Purpose: Enhance student ability to evaluate and treat different dental cases and. Practice the theoretical techniques and acquire the necessary clinical skills to operate.
Approach: Allows the student to diagnose and treat various dental health situations and problems in preventive point of view
4. repetitive exams every lecture encouraging students to focus and interact with cases viewed
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	1- Prevention of oral disease -What is preventive dentistry? Prevention is better than cure -Is preventive dentistry still needed -Levels of prevention Caries prevention, how far it had come in one century	Preventive dentistry	Theoretical lecture using PowerPoint presentation. + practical work.	Daily, monthly, semiannual and final exams. and requirements evaluation + Quiz.
2	(1) theory (2) clinical	2- Dental caries development -Etiology of dental caries -Inorganic and organic component of tooth -Terminology of dental caries -Dynamic process of De / remineralization -The development of a carious lesion -Root caries -Clinical appearance of root caries Classification of root caries	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. and requirements evaluation + Quiz.
3	(1) theory (2) clinical	3- Diagnosis of Dental caries -Detection systems of caries -Visual and tactile examination -Radioghraphic techniques -Electrical current measurement -Fiber optic transillumination -Fluorescent tichniques Other techniques like dyes,, ultrasound techniques, photo thermal radiomerty	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirements evaluation + Quiz.
4	(1) theory (2) clinical	4- Fluoride in dentistry -Introduction -Fluoride in environment -Fluoride metabolism (absorption, distribution and excertion of fluoride in the body)	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirements evaluation + Quiz.
5	(1) theory (2) clinical	5-Fluoride in prevention and controlling dental caries -Mechanism of action -Fluoride's effect on tooth mineral Fluoride effect on plaque and bacterial metabolism	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
6	(1) theory (2) clinical	6- Topical fluoride therapy professionally applied fluoride -Introduction -Advantages and disadvantages of topical fluoride application -Fluoride compounds -Classification of Professionally applied fluoride.	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
7	(1) theory (2) clinical	7- Topical fluoride therapy :Self-applied fluoride -Requisites for self-applied fluoride agents -Fluoride dentifrices and Mechanism of Action Fluoride mouth rinses, Indications and Recommendations.	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
8	(1) theory (2) clinical	8- Safety and toxicity of fluoride -Fluoride Toxicity -Factors influencing acute toxicity -Management of acute toxicity.Recommendations for parents Chronic Toxicity(Dental fluorosis and bone fluorosis)	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	9- Dental sealants -definition -History -indication and contraindication -sealant in adult -Ideal sealants materials -Requisites for Sealant Retention -Sealant Placement Guidelines -Fluoride-Releasing Sealants -Glass ionomer sealants -Colored Versus Clear Sealants -Sealants for proximal enamel surfaces Sealing over caries lesions .	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. And requirement Evaluation +Quiz.
10	(1) theory (2) clinical	10-New approach in restorative dentistry -Minimally Invasive Treatment Technique -Minimally Invasive Cavity Preparation -Non-machinery Preparation -LASER -Chemo mechanical Caries Removal -Preventive Resin Restorations -Remineralization Treatment	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
11	(1) theory (2) clinical	11-Microbiology of dental caries -Microbial ecology in the oral cavity -Acquisition of the resident oral microflora -Site distribution of oral bacteria -Ecological factors affecting the growth and metabolism of oral bacteria -Dental biofilms: development, structure, composition and properties -Development of dental biofilms -Pellicle formation -Microbial colonization -Initial microbial colonization -Microbial succession -Microbial composition of the climax community (mature biofilm) -Virulence of microorganisms -Major dental caries-associated bacteria Other caries-associated bacteria	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	12 Saliva and host defense mechanism -Function of saliva -Composition of saliva -Salivary flow rate -Influence of saliva on dental caries -Oral immune system -Non-specific immune factors -Specific immune factors Immunization of dental caries	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
13	(1) theory (2) clinical	13- Caries risk assessment -Goals of Caries Risk Assesment -Caries Disease Indicators -Caries Risk Factors -Caries Protective Factors -Factors in Low, Moderate and High Caries cariogram	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
14	(1) theory (2) clinical	14- infection control -Transmission of infection -Standard precautions -Components of infection control -Treatment room features -Single use disposable instruments Biomedical waste management	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	15 Oral hygiene measures (Mechanical) -Acquired pellicle -Dental plaque -Dental calculus -Mechanical plaque control aids -Toothbrushes -Tooth brushing methods -Powered toothbrush -Objectives of toothbrushing -Interdental Cleaning aids -Dental floss -Wooden tips -Interdental brushes -Miswak -Oral irrigation devices -Gingival massage	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
16	(1) theory (2) clinical	16-Oral hygiene measures (Chemical) -Ideal properties of chemical plaque control agents -Modes of action -Chlorhexidine -Triclosan -Essential oil mouthwashes or Listerine -Enzymes -Sanguinarine extracts -Metal ions -Antibiotics -Dentifrices -Composition of dentifrices	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
17	(1) theory (2) clinical	17-Diet and dental caries -Role of carbohydrates in caries development -Evidences -Factors affecting food cariogenicity -Physical form of food and clearance time -Types of fermentable carbohydrate -The basic Stephan curve -Frequency of intake sugar and dental caries	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
18	(1) theory (2) clinical	18 Non- sugar sweeteners -The sweetness of sugars -Non- sugar sweeteners -Bulk sweeteners -Intense sweeteners -Protective factors in food -Fruit and dental caries -Testing food cariogenicity	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
19	(1) theory (2) clinical	19 Dietary counseling in dental practice -Nutritional status assessment - Body Mass Index -Assessment of dietary intake -Objectives of dietary assessment -24-hour recall -Dietary record -Food frequency questionnaires -Evaluation of cariogenic potentiall -Evaluation of nutritive value -Dietary counseling -Approach to counseling -Motivation	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	20- Nutrition and dental health -Nutrition dental caries -Systemic effect -Morphology of the teeth -The quality of the hard tissues -Quality of saliva -Evidences of the effect of some nutrients on dental caries -Nutrition and eruption of teeth	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
21	(1) theory (2) clinical	21-Prevention of periodontal disease and oral cancer by nutrition -Nutrition and periodontal health -The mechanisms by which nutrition may affect periodontal disease -Effect of food texture on periodontal health -Nutrition and oral mucosal disease -Nutrition and oral cancer -Primary prevention Secondary prevention	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	22- Probiotics and dental health -Caries-related mechanisms of probiotic activity -Probiotics and counts of mutans streptococci -Probiotics and caries occurrence -Probiotics and periodontal health	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	23-Diagnosis and prevention of dental erosion -Prevalence -Early detection -Etiology -Protection against erosion -Prevention of erosion .	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	24-Prevention of malocclusion -Normal development -Etiology of malocclusion -Interceptive measures -Tooth anomalies -Risk assessment	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
25	(1) theory (2) clinical	25preventive measure for population with developmental disabilities -Disability definition -Classification of disabling conditions -The issues regarding the delivery of care to people with disabilities -Dental management and preventive measures among disabled individuals -The risk factors for dental caries among disabled individuals -People with physical (neurological) impairment -Visual Deficits -Hearing problems -Mentally retardation -Specialized Equipment for disabled patient management -Dental care for Institutionalized disabled individual	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	26-preventive treatment strategies for medically compromised populations -Introduction -Eating disorders: Characteristics and preventive treatment strategies -Depression: Characteristics and preventive treatment strategies -Diabetes mellitus: Characteristics and preventive treatment strategies -Epilepsy: Characteristics and preventive treatment strategies -Blood disorders: Characteristics and preventive treatment strategies	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	27- Ozone in the prevention of dental diseases -Definition and physical properties -Mode of action -Safety -Application of ozone in dentistry -Effects of ozone on oral microorganisms and oral cells -Ozone for disinfecting dentures -Ozone instruments designed for dentistry -Ozone in the management of incipient caries -Ozone in the management of open caries -Treating root caries with ozone	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	28-Geriatric dentistry -population characteristics -Physiologic Changes -Functional status -common oral manifestation -preventive measures long term care	Preventive dentisitry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.
29	(1) theory (2) clinical	29- Implant care -Dental implant parts -Dental implant and biofilm -Implant Maintenance -Professional care in dental clinic -Home care	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
30	(1) theory (2) clinical	30- Protection of the dentition -Impact of dental trauma -Types of traumatic dental injuries to teeth -Sports dentistry -Protective mouth-guards -Evidence of effectiveness -mouth-guards and oral & systemic infections	Preventive dentistry	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.	Note: Clinical Requirement Grading is 5% out of 25% of total first and second semesters grades.
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Not separately specified in the 2025-2026 course specification.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Preventive Procedures: 50-60 scaling and polishing procedures.
Fluoride Treatments and Sealants: 25-30 applications.
Community Programs: Participate in 2-3 community outreach or preventive health programs.
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Course Description Form

TUD506 - Prosthodontics (Fifth Year)

1. Course Name:	Prosthodontics
2. Course Code:	TUD506
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 6 hour/week; Total annual contact hours: 210; Total units: 8 (Theory units: 2; Practical/Clinical units: 6).
7. Course administrator's name (mention all, if more than one name)	Assoc. Prof. Dr. Ghasak Husham Jani

Supplementary Course Description

This course focuses on the theory and practice of complete denture construction for edentulous patients. Students will learn the diagnostic and clinical steps involved in designing, fabricating, and fitting complete dentures. Key topics include impression techniques, jaw relation, occlusion, and denture aesthetics. Emphasis is placed on patient comfort, retention, and functional outcomes. Practical sessions will develop the skills needed for successful denture therapy

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Students will demonstrate a foundational understanding of removable partial denture principles relevant to dental use.
2- Able to identify different types of prosthesis and apply appropriate techniques for optimal result
3. Students will commence clinical training activities in removable prosthodontics
4- Effectively knowledge the basis for the study of prosthodontics relating to the diagnosis, treatment planning, rehabilitation and maintenance of the oral function, comfort, appearance and health of patients with clinical conditions associated with missing or deficient teeth and/or oral and maxillofacial tissues using biocompatible substitutes

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1 + 2	2	Occlusion in complete denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
3 + 4	2	Retention, stability and support	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
5 + 6	2	Complications of complete denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
7 + 8	2	Post insertion problems	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
9 + 10	2	Immediate denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
11 + 12	2	Classification system for completely edentulous patients	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
13	1	Posterior palatal seal area	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
14	1	Single complete denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
15 + 16	2	Geriatric dentistry	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
17 + 18	2	Maxillofacial Prostheses	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
19	1	Residual Ridge resorption	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
20 + 21	2	Dental implantology	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
23	1	Characteristics of ideal materials for dental implant	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
24 + 25	2	Esthetics in complete denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
26	1	Copy denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
27 + 28	2	Over denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
29	1	Attachments in over denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.
30	1	Neutral zone in complete denture	Prosthodontics	Theoretical lecture	Daily, monthly, mid-year, and final examinations.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Zarb, Hobkirk, Eckert, Jacob et al. Prosthodontic treatment for edentulous patients: Complete dentures and implant-supported prostheses.13th edition 2013 Mosby. McCracken's removable partial prosthodontics, 13th edition 2016 by Elsevier, Inc.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Complete Dentures: 5-10 complete denture cases (including initial impressions to final fitting).
Partial Dentures: 5-7 removable partial denture cases.
Crown and Bridge Restorations: 5-10 fixed restorations, including crowns and bridges.
Implant Restorations: 3-5 implant-supported prosthetic restorations.

Course Description Form

TUD507 - Orthodontics (Fifth Year)

1. Course Name:	Orthodontics
2. Course Code:	TUD507
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 4 hour/week; Total annual contact hours: 150; Total units: 6 (Theory units: 2; Practical/Clinical units: 4).
7. Course administrator's name (mention all, if more than one name)	Prof. Dr. Hayder Fadhil Saloom Saloom.hayder@gmail.com

Supplementary Course Description

A- Knowledge and Understanding: Acquire the knowledge about different treatment for correcting various malocclusion.
B- Subject-specific skills includes:
1- Learning different methods of diagnosing malocclusion
2- Learning different orthodontic appliance used specifically for each case.

8. Course Objectives

1- Understand orthodontic principles, identify malocclusions, and develop comprehensive treatment plans using diagnostic tools and growth considerations.
2- Perform patient evaluations, apply orthodontic techniques (e.g., banding, bonding), and monitor treatment progress.
3- Effectively explain treatment options to patients and collaborate with dental specialists.
4- Obtain informed consent, ensure ethical decision-making, and maintain accurate records.
5- Apply evidence-based practices, evaluate treatment outcomes, and engage in continuous professional development.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college.
5. The students are guided to perform seminars and reports
This course will prepare the students practically to diagnose and correct simple cases of malocclusion.
6. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (2) clinical	Orthodontic diagnosis and treatment planning: Personal data Consent form Clinical examination i. General body stature. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (2) clinical	ii. Face examination in 3 dimensions iii. skeletal examination iv. Soft tissue examination. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar+ practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (2) clinical	v. Occlusion. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (2) clinical	vi. Dentition vii. Temporomandibular joint. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (2) clinical	Diagnostic aids Cephalometrics Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (2) clinical	Orthopantomography Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (2) clinical	iii. Study models Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
8	(1) theory (2) clinical	iv. Photography v. 3D imaging vi. Other views. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
9	(1) theory (2) clinical	Treatment planning Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
10	(1) theory (2) clinical	Treatment of Medically compromised patients. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
11	(1) theory (2) clinical	Orthodontic indices. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
12	(1) theory (2) clinical	Space analysis, Bolton's ratio. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
13	(1) theory (2) clinical	Serial extraction Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
14	(1) theory (2) clinical	Teeth extraction in orthodontics. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
15	(1) theory (2) clinical	Method of space creation and closure. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
16	(1) theory (2) clinical	Vertical and transverse problems: a. Deep bite. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
17	(1) theory (2) clinical	b. Open bite. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
18	(1) theory (2) clinical	c. Crossbite and scissors bite. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
19	(1) theory (2) clinical	Treatment of common local factors: a. supernumerary and hypodontia b. Early loss of deciduous teeth c. Retained teeth, delayed eruption, impaction, ankylosis d. Abnormal eruptive behavior e. Large frenum. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
20	(1) theory (2) clinical	f. Bad oral habits. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
21	(1) theory (2) clinical	Treatment of aberrant position of canines. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
22	(1) theory (2) clinical	Treatment of general factors: a. Class I treatment (crowding, spacing, biprotrusion). Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
23	(1) theory (2) clinical	b. Class II div. 1 treatment. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
24	(1) theory (2) clinical	c. Class II div. 2 treatment. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
25	(1) theory (2) clinical	d. Class III treatment. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
26	(1) theory (2) clinical	Treatment of adults a- Periodontal problems. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
27	(1) theory (2) clinical	b- Orthognathic surgery. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
28	(1) theory (2) clinical	Cleft lip and palate. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
29	(1) theory (2) clinical	Digital orthodontics (digital approach in orthodontic diagnosis and treatment). Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
30	(1) theory (2) clinical	Artificial intelligence in orthodontics. Clinical work.	Orthodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar) (5%Clinical Requirements)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Clinical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Books: 1.Contemporay orthodontics 3. Orthodontics; current principles and technique 4. Introduction to orthodontics Articles: 1. Deicke, M, Pancherz, H: Is radius-union an indicator for completed facial growth?. Angle Orthod. 75, 2005, 295–299. 2. Ker, AJ, Chan, R, Fields, HW, et al.: Esthetic and smile characteristics from the layperson's perspective: a computer-based survey study. J Am Dent Assoc. 139, 2008, 1318–1327. 3. Kantor, ML, Norton, LA: Normal radiographic anatomy and common anomalies seen in cephalometric films. Am J Orthod Dentofac Orthop. 91, 1987, 414–426.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Fixed Appliances: 10-15 cases involving the placement and adjustment of braces (both partial and full).
Removable Appliances: 5-10 cases involving the design and use of removable orthodontic devices.
Orthodontic Assessments: 10-12 cases requiring full diagnostic assessments and treatment planning.
Retention: 5-7 cases involving the use of retainers post-treatment

Course Description Form

TUD508 - Periodontics (Fifth Year)

1. Course Name:	Periodontics
2. Course Code:	TUD508
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and practice application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 3 hour/week; Total annual contact hours: 120; Total units: 5 (Theory units: 2; Practical/Clinical units: 3).
7. Course administrator's name (mention all, if more than one name)	Lect. Taif Mahdi Saleh. Email: - taif.mahde@uoturath.edu.iq

Supplementary Course Description

The course provides an overview of periodontology, enables students to effectively diagnose. periodontal disease and equips students with the knowledge and skills to scaling correctly. In addition, the course explains the significance treat correctly. This includes the types of instruments, treatment techniques, a surgical procedure.

8. Course Objectives

Upon completing the fifth-year periodontics course, students will be able to acquire both theoretical knowledge and practical skills related to the prevention diagnosis and treatment of periodontal disease. These outcomes are designed to prepare students for clinical practice and enhance their understanding of the critical role of periodontal health in overall well-being. Key student learning includes:
1-Understanding of periodontal anatomy and physiology.
2-knowledge of periodontal disease.
3-Diagnostic skills.
4-Preventive and therapeutic strategies.
5-Understanding the relationship between periodontal health and systemic health.
6-Patient management.
7-Communication skills.
8-Research and evidence-based practice.
9-Critical thinking and problem solving.
10-Ethical and professional behavior.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1. Microsoft power point lecture method.
2. Discussion method.
3. Report method.
4. Practical training in educational clinics located in the college, enhance student ability to diagnose and treat the patients.
5. Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	(1) theory (3) clinic	Periodontal examination and diagnosis Clinical work.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + clinics.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
2	(1) theory (3) clinic	Bone loss and patterns of bone destruction Clinical work.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar+ practical work. Clinics	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
3	(1) theory (3) clinic	Radiographic aids in the diagnosis of periodontal disease Clinical work.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
4	(1) theory (3) clinic	Advanced diagnosis Clinical work.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirements evaluation + Quiz.
5	(1) theory (3) clinic	Periodontal response to external forces Clinical work.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
6	(1) theory (3) clinic	Immunology Innate immunity Clinical work.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.
7	(1) theory (3) clinic	Immunology Adaptive immunity Clinical work.	Periodontics	Theoretical lecture using PowerPoint presentation. Seminar + practical work.	Daily, monthly, semiannual and final exams. Seminar and requirement Evaluation +Quiz.

11. Course Evaluation

	Theory	Practical	Total
First & Second Half	15% (6%Weekly Quizzes) (6% Semester Exam) (3% Student Attendee)	10% (3%Weekly Quizzes) (2%Seminar)	25%
Midterm	15% (Written Exam)	0%	15%
Final	40% (Written Exam)	20% (Practical Exam)	60%
Total	70%	30%	100%
*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%	*The passing grade for the course is 50%

Student Grade	Grading system
49.4% and less	Failed
50%-59%	Accepted
60%-69%	Intermediate
70%-79%	Good
80%-89%	Very Good
90%-100%	Exceptional

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Required Textbooks: Newman and Carranza's Clinical Periodontology - 14th Edition (2023) Lindhe's Clinical Periodontology and Implant Dentistry - 7th Edition (2021) Recommended books and references: Journals Oral Surgery, periodontology.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.

Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Scaling and Root Planning: 20-30 cases of non-surgical periodontal therapy.
Periodontal Surgeries: 5-7 cases of flap surgeries, bone grafts, or guided tissue regeneration.
Follow-up Care: 15-20 cases of periodontal maintenance and follow-up monitoring.
Periodontal Assessments: 25-30 comprehensive periodontal evaluations.

Course Description Form

TUD509 - Research Method and Project (Fifth Year)

1. Course Name:	Research Method and Project
2. Course Code:	TUD509
3. Semester / Year:	2025-2026 / Annual course
4. Description Preparation Date:	10-09-2025
5. Available Attendance Forms:	Comprehensive onsite learning, combining theoretical and laboratory application.
6. Number of Credit Hours (Total) / Number of Units (Total)	Theory: 1 hour/week; Practical/Clinical: 0 hour/week; Total annual contact hours: 30; Total units: 2 (Theory units: 2; Practical/Clinical units: 0).
7. Course administrator's name (mention all, if more than one name)	Lec. Saied Turkey Al-Arrack. Email: - mohammed.jasim@turath.edu.iq

Supplementary Course Description

The Research Methods in Dentistry course equips dental students with essential skills to design, conduct, and evaluate research relevant to dental science and practice. Students will learn various research methodologies, including experimental and observational studies, and gain proficiency in data collection, analysis, and interpretation. The course emphasizes ethical considerations, statistical analysis, and writing research papers. By the end, students will be able to critically assess research literature and communicate findings effectively. This foundational course prepares students to contribute to evidence-based dental practice and innovation

8. Course Objectives

The student enrolled in this course should achieve the following SLOs after completion of the course:
1- Design and plan a research study with the right methods.
2-Analyze data and interpret results using basic statistics.
3-Critically assess research, communicate findings, and understand ethics.

9. Teaching and Learning Strategies

designed to provide comprehensive knowledge and practical skills through various educational methods. Involved strategies are:
1-Lectures: Learn research methods with real dental examples.
2-Workshops & Case Studies: Practice research techniques and analyze studies.
3-Group Work & Projects: Collaborate on research projects and present findings.
4- Critical thinking and problem solving:

5. Technology support:

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
3 weeks' time	(3) theory	1- Statistics.	1- Statistics.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
2 weeks' time	(2) theory	2- Medical research ethics.	2- Medical research ethics.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
3 weeks' time	(2) theory	3- Biosafety.	3- Biosafety.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
3 weeks' time	(3) theory	4- Designing research.	4- Designing research.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
3 weeks' time	(3) theory	5- Citation in academic writing	5- Citation in academic writing	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.
2 weeks' time	(2) theory	6- Planning a research protocol.	6- Planning a research protocol.	Not separately specified in the source syllabus.	Not separately specified in the source syllabus.

11. Course Evaluation

The detailed 100-point distribution is not separately stated in the 2025-2026 course specification. Course assessment is implemented in accordance with College and University examination regulations.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Main Reference: Different books and PubMed.
Main references (sources)	Not separately classified in the 2025-2026 course syllabus.
Recommended books and references (scientific journals, reports...)	Not separately classified in the 2025-2026 course syllabus.
Electronic References, Websites	Not separately classified in the 2025-2026 course syllabus.

Supplementary Clinical / Practical Requirements

Required Cases:

Research Project: Complete 1-2 research projects related to clinical dentistry, focusing on data collection, analysis, and presentation