DEN3001 Clinical Medical Sciences in Dentistry-I

Course title	Code	Semester	Type of course	Course structure and volume (hours)			ECTS
Clinical Medical Sciences in Dentistry-I	**DEN3001**	**V**	**Mandatory**	**LECTURE**	35	120	**4**
				Seminar	12		
				Teaching in Stimulatory environment (TSE)	10		
				Teaching in clinical environment (TCE)	6		
				Midterm EX.	1		
				FINAL EX.	2		
				INDEP. WORK	54		

Faculty, the educational program and level of education	School of Dental Medicine One cycle (5-years duration) Higher Educational program "Dentistry"
Staff	**Tsitsi Jorjoliani – invited lecturer, MD,PhD** **E-mail:tsitsi.jorjoliani@bauinternational.edu.ge** **Mob.:593 503 282** **Kakha Vacharadze** - Invited Teacher, MD, PhD Mob: Email: kakha.vacharadze@bauinternational.edu.ge **Ekaterine Dolmazashvili** – invited Teacher, MD, PhD Mob: 592323200 email: ekaterine.dolmazashvili@bauinternational.edu.ge **Gocha Barbakadze** invited Teacher, MD, Mob: 599901091 email: gocha.barbakadze@bauinternational.edu.ge **Giorgi Javakhishvili**, Invited Teacher, MD Mob.tel: 598339955; E-mail: giorgi.javakhishvili@bauinternational.edu.ge **Maia Zamutashvili** - Invited Teacher, MD, PhD Mob.tel: 599515264; E-mail: maia.zhamutashvili@bauinternational.edu.ge **Giorgi Mgvdeladze-**Invited teacher Mob.tel: 555699845; E-mail Giorgi.mgvdeladze@bauinternational.edu.ge **Sabina Mejidova-**invited teacher Mob.tel: +995 577 14 09 39 E-mail sabina.mejidova@bauinternational.edu.ge Personal one-to-one consultation can be arranged at an agreed upon date and time.
Duration	4 weeks
Prerequisite	Biological Basics of Diseases I-II (DEN2001; DEN2003)

Aim	The aim of the course is to give a student the knowledge about the diagnostic, differential diagnostic procedures in circulatory, respiratory and GI system disease and dental approach to patients with above mentioned systemic diseases.
Methods of Teaching/Learning	Interactive lectures, Seminars, TCE and TSE
Assessment System and Criteria	**Attendance - student is obliged to attend 70% of the total number of the learning course** The knowledge of the student is evaluated by 100 point-based evaluation system out of which 40 points is allocated for the current activity assessment, 20 for each midterm exam and 40 points for the final exam. **1. Current activity assessment - 40 points, including the following:** ● CBD - 3x10points=30 points; ● DOPS – 6X5points=5 points; (calculating average) ● Mini-CEX 3x5 points= 5 points; (calculating average) **Case Based Discussion (CBD) – 10 points** Student will discuss cases in front of lecturer. Each case will be evaluated with maximum 10 points. There is 5 assessment component for each case: **1. Defines the problem- 2 points** What are the issues raised in this case? What are the pathological processes? What problems are you trying to resolve? **2. Integrates information - 2 points** What relevant information you have? How will the data/information/evidence you have will help you to make your decision? How did you use the data/information/evidence available to you in this case? What other information could have been useful? **3. Prioritizes options of diagnostic methods - 2 points** What are your options? Which did you choose? Why did you choose this particular one? What are the advantages/disadvantages of your decision? How do you balance them? **4. Justifies decision of treatment - 2 points** How do you justify your decision? What are the implications of your decision? What evidence/information have you to support your choice? Can you give an example? Can you apply it to this case? **5. Upholds duties of a doctor - 2 points** What ethical framework did you refer to in this case? How did you apply it? How did you establish the patient's point of view? What are your responsibilities/duties? How do they apply to this case? How did you make sure you observed them? Why are they important? **Evaluation criteria for each five components:** 2 points – in full compliance

1 point – partially compliant
0 points – non compliant

Directly Observed Procedural Skills (DOPS) assessment criteria - 5 points

Student will perform following practical assignments on the manikin:

Assessed Competencies	Poor (0 points)	Fair (0.5 points)	Competent (1 point)
Preparation/aftercare/safety	○□	□○	□○
Technical expertise	○□	□○	□○
Clinical Reasoning/Judgement	○□	□○	□○
Organization and efficiency/time management	○□	○□	□○
Professional conduct	○□	○□	□○
Total score:			

Complexity of the task:	□ ○ **Low**	□ ○ **Medium**	○□ **High**

Mini clinical evaluation exercise (Mini-CEXs) 5 points

Exercise will be performed in clinical environment (simulation or bed side) in the process of student's individual work with patient. Each exercise will be evaluated with 5 criteria, maximum 1 point for each.

Good - 1 point,
Satisfactory - 0.5 Points,

Unsatisfactory - 0 points,

1. Medical Interviewing Skills (score 1)
- Encourages the patient to communicate about his medical history;
- Sets appropriate questions to obtain information;
- Responds appropriately to emotion and non-verbal signals.

2. Physical Examination Skills (score 1)
- Maintains a logical and efficient sequence;
- Maintains a balance between general and hypothetical focused research;
- Informs the patient;
- Shows sensitivity to patient's comfort and modesty.

3. Professional Qualities (score 1)
- Shows respect, commitment, empathy, and generates confidence;
- Responds adequately to discomfort and embarrassment;
- Responds appropriately to the need for privacy and information.

4. Problem analysis, clinical reasoning (score1)
- Uses appropriately and selectively diagnostic procedures;
- Considers properly risks and profit.

5. Communication with the patient (score 1)
- Explains in understandable terms for the patient indications for examination and treatment;
- Asks for informed consent where necessary;
- Discusses the policy;
- Provides information in accordance with the law on patients' rights.
- Informs patient regarding disease prevention and healthy lifestyle.

2. Midterm Exams - 20 points;

The exam is conducted in test form (50 MCQ. Max score 0.4) form. The highest possible score is 20.

3. Final Exam - 40 points

Final Exam is conducted in a combined form:

Oral form -5 Clinical Cases each scored at maximum 4 points. Totally 20 points.

OSCE - maximum 20 points

Prerequisites for Final Exam are:

- Prerequisite for Final Exam is the situation when at least 70 % of the Mini-CEXs and DOPS scores are achieved.
- 70% of learning course hours should be attended.

Final Exam Case analysis (written assignment) (4 points)

Students will discuss/analyze clinical case according to study materials individually in written manner.

Points Grading Scale

4 interpretation of examination results are correct, diagnosis is defined correctly, is evidence based, knows etiology, pathogenesis, clinical flow, treatment plan is defined correctly;

	3 interpretation of examination results are correct, diagnosis is defined correctly, is evidence based, knows etiology, pathogenesis, clinical flow, treatment plan is not correct; 2 interpretation of examination results are correct, diagnosis is defined correctly, is evidence based, does not know etiology, pathogenesis, clinical flow, treatment plan is not correct; 1 interpretation of examination results are correct, diagnosis is incorrect, treatment plan is not correct; 0 Interpretation of examination results are incorrect, diagnosis is incorrect, and treatment plan is incorrect. **OSCE (20 points)** On the exam there will be 4 station each max score -5 The exam is considered being passed by the student if he / she receives **50% or more** out of the highest evaluation for the exam (40x50/100=20 points). When the total evaluation of the student (current evaluation + midterm exam evaluation + final exam evaluation) is more that 40 but less than 51 points, even though the exam grade threshold is passed, the learning course is considered not being covered and the student is given the right to exam retake during the additional examination period. If the final evaluation for the Learning Course, after taking the additional exam, (current evaluation + midterm exam evaluation + final exam evaluation) is less than 51%, the learning course is not considered covered and it must be taken again. In summary, the student is awarded the credit in case he/she accumulates minimum 51% out of 100%. Within the educational component of the educational program, in case of FX assessment, a makeup exam is appointed no later than 5 days after announcement of the examination results. **Positive scores:** ● (A) Excellent- 91 or more points; ● (B) Very Good- 81-90 points; ● (C) Good- 71-80 points; ● (D) Satisfactory- 61-70 points; ● (E) Enough- 51-60 points; **Negative scores:** ● (FX) Failure - 41-50 points: the student needs more independent work and is granted a single attempt of exam retake; ● (F) Fail - 40 points or less: the student's conducted work is not sufficient and needs to take the course again. The student can take the additional exam during the same semester. After the results of final exams are available, students with FX assessment have a right to retake an exam during an additional exam week in the same semester. An interval between a final and a corresponding additional exam must be at least 5 days after the results of a final exam become available.
The core literature	**Harrison's Principles of Internal Medicine vol-1-** Dennis L.Kasper;Stephan L.Hauser; McGraw Hill Education; 19th ed; 2015;

	Harrison's Principles of Internal Medicine vol-2- Dennis L.Kasper;Stephan L.Hauser; McGraw Hill Education; 19th ed; 2015;
The auxiliary literature	Cardiology : a practical handbook By: LaFlamme, David. Boca Raton, Florida ; New York, New York ; Abingdon, England : CRC Press, 2016. Harrison's endocrinology. New York : McGraw-Hill, 2013 Scully, Crispian. Scully's medical problems in dentistry. 7th ed. Edinburgh : Elsevier, 2014

Learning Outcomes

NQF *	COURSE LEARNING OUTCOMES	PROG. LO	Lecture	Seminar	Teaching in simulation environment	Teaching in clinical environment	Midterm ex.	Final exam	ASSES. METH.
KNOWLEDGE AND AWARENESS	● Defines and recognizes the cardiovascular, respiratory, and gastroenterological disorders; ● Explains the dental approach to the patients with above mentioned disorders.; ● Recognizes serious cardiologic and pulmonary conditions requiring urgent management/intervention; ● Demonstrates understanding and application of pharmacological, medical and surgical management of cardiologic, pulmonary and gastrointesroenterologic patients; ● Undertakes, justifies and interprets common lab tests and investigations including imaging	**9.2 6.3**	**X**	**X**	**X**	**X**	**X**	**X**	**CBD DOPS Mini-SEX MCQ**
SKILL	The student: ● Provides a pre diagnosis and applies differential diagnosis ● Applies basic clinical and laboratory procedures for the diagnosis of cardiovascular, respiratory and GIS tract disorders; ● Demonstrates the ability to take a complex history as well as a focused system history in common disorders. ● Correctly performs a physical examination; including related systems examination and using relevant methods; ● Has clinical reasoning skills to formulate clear differential diagnoses and a management plan ● Properly analyzes and perceives patient complaints, genetic, social, and dental history . Can complete patient history ● understands the ethical principles of health care and acts accordingly at all times and in all situations, taking into account the needs of the patient and the interests of the patient . ● Based on the evidence, based on the latest knowledge, determines the causes and mechanisms of changes in the structure and functions of the human body in the case of various diseases.	**1.1 6.3 8.1. 4.1**		**X**	**X**	**X**		**X**	**DOPS, Mini-SEX OSCE**

	• Demonstrates critical self-assessment and peer assessment sharing skills and as a result understands when to seek help or advice. Correctly sets the limits of one's own • capabilities. Reveals professional responsibility for his actions and decisions.								
RESPONSIBILITY AND AUTONOMY	• manages information, solves the problem and makes a decision	**11.1** **11.3**							**CBD**

Supplement 1

Learning Course Content

weeks №	Topics	Lecture (hrs)	Seminar (hrs)	TSE (hrs)	TCE (hrs)
I	Cardınal manıfestatıon and presentatıon of dısease: Pain, Chest discomfort, abdominal pain, headache , back and neck pain; Alterations in body temperature: fever, fever and rash, fever of unknown origin. Patient physical examination, history taking, lab and instrumental investigation.	5		1	
II	**Alterations in circulatory and respiratory functions:** Dyspnea, cough and hemoptysis hypoxia and cyanosis, edema, murmur, palpitation. **Cardiovascular Diseases** Atherosclerosis; Hypertension and Hypotension Endocarditis Atheroma and Ischaemic Heart Disease/Coronary Artery Disease Acute Coronary Syndromes (ACS) Myocardial Infarction Cardiomyopathies; Arrhythmias (Dysrhythmias) Thyroid-Related Heart Disease Pulmonary Heart Disease (Cor Pulmonale) phlebothrombosis Ischemic disease of lower extremities. Cardiac Failure; Cardiac shock Arterial Dissection; thromboembolic disease; TSE (Blood Pressure Assessment) TCE (Blood Pressure Assessment)Angina Pectoris. Arrhythmia) CBD	10	4	3	2
III	**MIDTERM**	1			
III	**Respiratory system Disease** Asthma	10	4	3	2

	Churg–Strauss Syndrome (Allergic Granulomatosis or Angiitis) Chronic Obstructive Pulmonary Disease (COPD) Infections Lung Cancer TCE bed side teching Cystic Fibrosis (CF; Fibrocystic Disease; Mucoviscidosis) Bronchiectasis Occupational Lung Disease (Pneumoconioses) Respiratory Distress Syndromes Lung Transplantation TCE (Case Based Learning) TSL (Laboratory Examination)				
IV	**Alterations in GI system** Dysphagia, nausea, vomiting, indigestion, diarrhea, constipation, involuntary weight loss, gastrointestinal bleeding, jaundice, abdominal swelling and ascites; The Oesophagus, Stomach and Intestines disorders, Peritonitis; pancreatitis; Practical Activity Infectious Hepatitis; Fulminant Hepatic Failure Primary Sclerosing Cholangitis; Liver Cancer; Cirrhosis Congenital liver disease Postoperative Jaundice Liver Transplantation DOPS EXAMINATION TCE (Case Based Learning) Extrahepatic Biliary Obstruction TCE (Case Based Learning)	10	4	3	2
XVII-XXI	**Final Exam**	2			