DEN4013 Evidence-Based Dentistry

Course title	Code	Semester	Type of course	Course structure and volume (hours)			ECTS
Evidence-Based Dentistry	**DEN4013**	**VII**	**Mandatory**	**LECTURE**	15	60	**2**
				Seminar	15		
				Teaching in Simulation environment (TSE)			
				Teaching in the clinical environment (TCE)			
				Practical Lecture			
				Midterm EX.	1		
				FINAL EX.	2		
				INDEP. WORK	27		
Faculty, the educational program, and level of education	School of Dental Medicine One cycle (5-years duration) Higher Educational program "Dentistry"						
Staff	**Ana Chkhenkeli – Invited Lecturer** **Mob: 555 01 09 09 e-mail: ana.chkenkeli@bauinternational.edu.ge** **Nia Khachidze- invited lecturer** Nia.khachidze@bauinternational.edu.ge Personal one-to-one consultation can be arranged at an agreed-upon date and time.						
Duration	15 Weeks						
Prerequisite	Research Methodology & Biostatistics MED3007						
Aim	The aim of this course is to provide advanced knowledge of relevant scientific literature and conduct searches, and tools and methodology to critique the scientific literature and formulate clinical problems by using evidence-based literature, involve explicit and judicious use of current best evidence in making decisions about the care of individual patients, and ensure each student to apply the principles the conscientious.						

Methods of Teaching/Learning	Interactive Lectures and Seminars

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 are allocated for the current activity assessment, 20 for midterm exam and 40 points for the final exam. **Student's knowledge assessment:** ● PBC- 3X10 = 30 points ● Project preparation and presentation- 10 points ● Midterm –MCQ – 20 points ● Final exam-MCQ– 40 points **Total -100 points** **Problem Based Case (PBC) assessment criteria (10 points):** 1. Ability of problem-solving - **2 points;** 2. Ability of team work **- 2 points;** 3. Ability of decision-making - 2 points; 4. Ability of practical application of the acquired theoretical knowledge - 2 points; 5. Ability of using additional sources - 2 points; **Project preparation - Presentation (10 points)** 1. **Content - 1 point;** 2. Problem outline **- 1 point;** 3. Review of the literature on the issue **-1 point;** 4. Research methods relevance with the research goals **-1 point;** 5. Logical argumentation **-1 point;** 6. Deductions accuracy and correlation with the main text **-1 point;** 7. Visual and technical quality of the material -**1 point;** 8. Reliability of the sources -**1 point;** 9. Accuracy of the cited literature **-1 point;** 10. Relevance of wording and style - **1 point;** **Midterm exam** – MCQ – 20 points. Each MCQ question is assessed by 0.4 points (50 questions). For a positive result, the student must correctly answer at least **50%** of the total number of questions. **Final exam - 40 points.** FInal exam conducted in combined form: **20 SAQ (Short Answer Questions) Each evaluated with 1 points - Total 20 points** **Oral Exam - 4 topics, 5 points each - Total 20 Points**

Final exam prerequisites:

total number of points from project and PBC must be at least **30 points.**

Oral Exam topic assessment criteria (5 points)

5 points - The answer is comprehensive. Student's thinking ability is visible. The topic is precisely and fully presented. The terminology is duly used. The student masters the material regarded by the program on a proper level. He/she has adequately and profoundly learned main as well as supplementary literature.

4 points - The student answers all questions, but independent thinking ability is not clearly visible. The terminology is correctly used. No major errors can be found. The student masters the material regarded by the program on a proper level. He/she has learned the main literature.

3 points - The answer is incomplete. The topic is presented on satisfactory level but it lacks the thinking ability and is rather based on memorizing. The terminology is scarcely used. The student masters the material regarded by the program but a few errors can be detected.

2 points - The answer is incomplete. The terminology is incompletely used. The material is partially presented. The student masters the main literature on insufficient level. A few major errors can be detected.

1 point - Student's answer is not complete. The terminology is not used or is used in the wrong way. The answer is mainly erroneous. The topic is presented in a fragmented fashion.

0 points - The answer does not correspond to the question, or it is not presented at all.

The final exam is considered as passed if the student pass at least **60% out of 40 points** (minimal competence limit).

The course (module) is considered as passed if the student has **at least 51 points** during one semester.

Plagiarism/Cheating – Students are expected to be honest in their fulfillment of assignments and test-taking. Plagiarism and cheating are serious forms of academic misconduct. Any student caught plagiarizing or cheating on an examination will receive zero marks. Project will be checked by Turnitin. Behavior – Students are expected to behave according to the rules/procedures and ethical guidelines presented by the instructor and written in the University's code of ethics. They should not in any circumstances disturb the ongoing lectures/seminars/presentations and should follow all the rules and procedures established by the professor/instructor at the beginning of the course. The usage of mobile phones and other sound equipment is forbidden during lectures and test-taking situations. In case the student does not follow the above-mentioned rules/ethical guidelines and he/she intensely tries to spoil the lecture, the instructor is obliged to make the student leave the class and report the outcomes to the dean for further evolution.

The maximum course assessment score is 100 points.

	The student's assessment system includes: a) five types of positive assessment: (A) Excellent – 91-100 points. (B) Very good – 81-90 points. (C) Good – 71-80 points. (D) Satisfactory – 61-70 points. (E) Acceptable – 51-60 points. (FX) Student could not pass the examination – 41-50 point that means that the student is required to work more for passing the exam, and that she/he is entitled to retake the exam only once after individual work; (F) Failed to pass – 40 points and lower which means that the work done by the student is not sufficient and she/he has to retake the course. Within the educational component of the educational program, in the case of FX assessment, a makeup exam is appointed no later than 5 days after the announcement of the examination results. 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	Evidence-Based Dentistry: An Introduction, Allan Hackshaw, Elizabeth Paul, Elizabeth Davenportno e-book **Fundamentals of Evidence-Based Medicine**- Prasad, Kameshwar; Springer; 2nd ed. 2014; e-book
The auxiliary literature	

Learning Outcomes

NQF*	COURSE LEARNING OUTCOMES	PROG. LO	Lecture	Seminar	Teaching in a simulation environment	Teaching in the clinical environment	Practical Lecture	Midterm ex.	Final exam	ASSES. METH.

KNOWLEDGE AND AWARENESS	● Knows how to access articles with high evidence quality about diagnosis and treatment options. ● Explains the hierarchy of evidence. ● Compares evidence-based practices and research on professional practices. ● Shows conceptual understanding and insightful application of relevant scientific evidence. ● Evaluates a scientific paper according to clinical guidelines.	**2.2**	**X**	**X**				**X**	**X**	**PBC** **Project prep and pres** **MCQ**
SKILL	● Knows filtering in the literature database ● Uses current and valid research findings into their practice. ● Evaluates and discuss the dental literature. ● Correlates the sources of scientific literature, research design, and the hierarchy of evidence. ● Formulates and solve clinical problems using evidence-based literature. ● Uses valid research findings and show continuous improvement in clinical practices within ethical approaches.	**1.2** **2.2**	**X**	**X**					**X**	**PBC** **Project prep and pres** **Oral Exam**
RESPONSIBILITY AND AUTONOMY	● Has the ability of analysis and synthesis ● Has the ability to manage information ● Has the ability of problem solving, critical thinking and decision making ● takes into account the values of academic integrity in his work	**1.2.** **11.1** **11.2** **11.3** **11.4**	**X**	**X**						**Project** **Oral Exam**

Supplement 1

Learning Course Content

№	Topics	Lecture (hrs)	Seminar (hrs)	TSE (hrs)	TCE (hrs)	Practical Lecture

I-II	Evolution, definition, and historical development of the concept of evidence-based dentistry 6S model in evidence, evidence pyramid and evidence organization **Verbal Presentation**: Why read papers at all?	1	2			
III-IV	Power, reliability, and causality Chance, bias, confounding, and contamination **Verbal presentation**: Getting your bearings: what is this paper about?	1	2			
V-VI	Study design and types: Cross-sectional studies;Prospective cohort studies; Case-control studies; Retrospective cohort studies Statistics for the non-statistician:Papers that report trials of drug treatments and other simple interventions, Papers that report trials of complex interventions **Verbal presentation** Papers that tell you what things cost (economic analyses	2	2			
VII-VIII	**MIDTERM EXAM**	1				
IX	Evidence based dentistry practices and 5A rule in clinical practices **Verbal presentation**: Applying evidence with patient	1	2			
X	Randomized controlled studies; Review and Systematic Review; Meta-Analysis **Verbal presentation**: Papers that tell you what to do Papers that report diagnostic or screening tests and papers that report quality improvement case studies (guidelines)	1	2			
XI-XII	Randomized controlled studies; Review and Systematic Review **Verbal presentation**: Papers that report questionnaire research	2	2			
XIII	Use of critical thinking and checklists **Verbal presentation** : Criticisms of evidence-based healthcare Papers that go beyond numbers (qualitative research)	1	1			

XIV-XV	Searching and finding evidence based on the degree and reliability of evidence databases and literature search **Verbal presentation**: Papers that tell you what to do (guidelines); Criticisms of evidence-based healthcare	2	2			
XVI-XVII	Evidence based dentistry practices and 5A rule in clinical practices **Verbal presentation**: Papers that tell you what things cost (economic analyses) Papers that report questionnaire research	2	2			
	FINAL EXAM	2				