



UNIVERSITY OF ARKANSAS
PULASKI TECH

Course-Level Assessment Report
Course: DEN 1203 Biomedical Science
Academic Year: 2020-2021



1. Name of course: DEN 1203 Biomedical Science
2. Name of individual(s) compiling report: Tanielle Price, CDA, RDH, MS
3. Date of submission: September 28, 2021
4. Academic year: 2020-2021

Course-Level Learning Outcomes

1. What are the Course-Level Outcomes (CLOs)?

Student Learning / Course Outcomes – A&P Section

1. Identify body planes, directions and major body cavities.
2. Identify the basic structural units as applies to the cell, tissue, organs and systems.
3. Identify the components and major functions of the body systems.
4. Identify the bones and major landmarks of the skull and facial bones.
5. Identify the salivary glands and ducts and their functions.
6. Identify the special senses and sinuses as they relate to their corresponding body system and/or dentistry.

Student Learning / Course Outcomes – Microbiology and Oral Pathology Section

Requirements to meet the objectives of this unit are based upon information found in the assigned reading from the basic text, reference texts, and instructor's lectures. Upon completion of this unit the student will be able to:

1. Select historical events with persons contributing the events.
2. Identify three types of microorganisms of the most common concern of the dental office.
3. Identify means by which microorganisms may cause disease.
4. Select three factors that influence the disease producing capacity of a pathogen.
5. Identify the disease phases, stages, and means of disease transmission.
6. Differentiate between body defenses to microorganisms, inflammation, healing & repair.
7. Match terms that best describe classifications of lesions.
8. Identify the causes and progression of dental caries as well as diseases and conditions of the teeth and dental pulp.
9. Discriminate between periodontitis, periodontosis, periodontal pocket, periapical abscess, and periodontal abscess.
10. Identify various diseases of the oral soft tissue and conditions of the tongue.
11. Discuss symptoms, disorders and treatment of the TMJ.
12. Discriminate between the terms benign, malignant, metastasis and classifications of neoplasms and cancer.
13. Recognize symptoms of oral cancer and dental implications of radiation and chemotherapy treatments for patients of oral cancer.

Student Learning / Course Outcomes – Therapeutics Section

Requirements to meet the objectives are found in the basic text, assigned resource material and instructor lecture information. Upon the completion of this unit the student will be able to:

1. Select the divisions of Pharmacology and terminology as applied to drugs.
2. Identify the sources of drugs.
3. Identify the terminology of proprietary, generic, prescription, and over the counter drugs.
4. Identify drugs of the Controlled Substance Act of 1970, using the correct schedule number.
5. Identify drug publications which provide information concerning drug actions, side effects, means of dispensing, and identifications.
6. Recognize the role of the dental assistant concerning drugs and/or drug abuse and the potential for emergencies that could occur from medication uses.
7. Identify the major routes of drug administration.
8. Identify customary metric measurements used in pharmacology.
9. Arrange the seven components of a written prescription in the correct order of writing a prescription for a controlled substance.
10. Identify the English equivalent to the Latin abbreviation most frequently used in prescription writing and write a prescription, dictated by the instructor, using the recognized form and symbols.
11. Identify factors that may affect the storage and handling of drugs.
12. Match drug effects and terminologies that best describe the effect given.
13. Identify drugs used for anxiety control and differentiate between a sedative and hypnotic drug.
14. Differentiate between mild and strong analgesic drugs.
15. From a list of antibiotics and other therapeutic agents and conditions common to the dental patient, match the drug that is most commonly prescribed for each condition.

2. Which CLOs were addressed for the academic year?

3. Identify the salivary glands and ducts and their functions. – A&P
4. Identify means by which microorganisms may cause disease. – Micro & Oral Path
5. Identify the terminology of proprietary, generic, prescription, and over the counter drugs. - Therapeutics

6. Which CLOs are being addressed in your assessment plan in the upcoming academic year?

4. Identify the bones and major landmarks of the skull and facial bones. – A&P
8. Identify the causes and progression of dental caries as well as diseases and conditions of the teeth and dental pulp.- Micro & Oral Path
5. Identify drug publications which provide information concerning drug actions, side effects, means of dispensing, and identifications. – Therapeutics

7. Explain the assessment cycle.

Didactic exams are performed with paper and pencil or via technology. Competency evaluations, which evaluate practical skills, are performed after lab practice, peer review, and critique from (an) instructor(s). Since our program has just started documenting our course learning outcomes, we look towards adding new data each year.

8. What are the assessment methods? Are they direct or indirect?

All assessment methods are direct and require satisfactory performance in order to move forward without remediation. Competencies are mandatory and require 70% passing score to move forward in the program. **There are no competencies in this course.** Written exams test information from the didactic section of the course. Written assignments, such as workbook and review assignments, evaluate and reinforce learning outside of written exams.

9. What are the assessment goal(s), including benchmarks?

1. Graduates will perform dental assisting responsibilities and related office and laboratory procedures under the direct supervision of the dentist.
2. Graduates will function as a valued team member, exhibiting professionalism and ethics.
3. Graduates will demonstrate proficiency in dental assisting skills and competencies to meet registration requirement with the Arkansas State Board of Dental Examiners and qualify for the Dental Assisting National Board Exam.
4. At least 80% of students will be retained in the program for the second semester.
5. At least 85% of graduates will be employed in the dental field or continuing their education within six months of graduation.
6. At least 80% of graduates will report satisfaction with the instruction and overall program experiences.
7. Greater than 75% of employers of the program graduates will report satisfaction with clinical and academic skills.

10. What were the findings for the academic year?

Identify the salivary glands and ducts and their functions **(AP Exam 3) Exam Passing Rate – 92%; Average Score – 88.4%**

Identify three types of microorganisms of the most common concern of the dental office.

Micro/Oral Path Exam 1: Passing rate 92% – Average score – 86.6%

Identify the terminology of proprietary, generic, prescription, and over the counter drugs

Therapeutics Exam 2: Passing rate 100% – Average score – 84 %

11. What is your analysis of the findings?

Students are gaining both the education and skills in the program to perform in their roles as dental assistants and meeting the CLOs related to the biomedical sciences that make up the foundation of dentistry. They are meeting the standards of familiarity set forth by CODA, the accrediting body of our dental assisting program.

9. What is the action plan for the upcoming academic year?

Explain.

Based upon feedback from students and the dental community and standard guidelines set forth by CODA, CLOs will be chosen to assess where the greatest need is founded. We also have plans to include a comprehensive examination for the course. The goal of a comprehensive exam is the same as last year, changes due to Covid-19 prevented us from moving forward with this goal.