# LUNA COMMUNITY COLLEGE

# Dental Assistant Certificate Curriculum Profile 2012-2015

Content	Page
Program Goals	2
Degree Requirements	3
Course descriptions and Outcomes	4
Assessment	11
Minimum Syllabus Requirements	12

# **Program Goals**

The dental assisting program provides an education based in the social, behavioral, and biological sciences. The curriculum is delivered by fulfilling three components of instruction, learning, and assessment. Emphasis is placed on developmental education/ advising, curriculum delivery, and outcomes.

The major emphasis of dental assisting education is educating a dental auxiliary who is ethically and morally responsible, clinically competent, and facilitates comprehensive quality care. The dental assisting program will utilize current theory, emerging technology, and evaluation in concert with local dentist professionals to ensure graduates have the knowledge, skills, and attitudes to be successful.

The Dental Assisting Program is accredited by the Dental Assisting National Board (DANB). Completion of this certificate can be applied toward the Associate of Applied Science Degree in Vocational/Technical Studies.

# Graduates from this program will:

- Utilize appropriate decision-making skills and collaboration with others to deliver preventive oral health care to clients of various age groups and with complex health care problems.
- Demonstrate accountability and practice professional roles when providing dental care for clients.
- Provide care that is consistent with values, beliefs and cultural traditions when caring for clients with complex health needs.
- Provide care that is consistent with values, beliefs and cultural traditions when caring for clients with complex health needs.

#### DENTAL ASSISTANT Certificate Minimum of 51 Credit Hours

Dental assistants perform a growing variety of duties in the dental field. Duties include but are not limited to: therapeutic communication, multicultural interaction, psychology, oral health, preventive techniques, nutrition, chair side instrumentation, infection control, equipment safety, equipment maintenance, dental office emergencies and pain/anxiety management. The New Mexico State Board of Dental Health has implemented new standards that include certification in coronal polishing, topical fluoride as well as pit and fissure sealants. The assistant is responsible for all preparation of dental office procedures, chair side assisting, and reception activities. The demanding versatility requires a person dedicated to the profession and a commitment to function as a dental health care team member.

Completion of this certificate can be applied toward the Associate of Applied Science Degree in Vocational/Technical Studies.

# **Institutional Proficiency Requirement**

In addition to the courses listed below for this program of study, students must also complete institutional proficiency of MATH075 that are outlined on page 77 to meet all graduation requirements.

Certificate Requirements		Credit Hours: 51
Program Requirements(37 hours)		
DENT103	Dental Materials	5
DENT109	Preventative Dentistry/Oral Health Care	1
DENT118	Dental Assisting	3
DENT119	Dental Terminology	1
DENT128	Community Field Experience	1
DENT145	Bio-Dental Science	3
DENT160	Dental Radiology	4
DENT167	Oral Medicine	2
DENT170	Clinical Training/Practicum I	7
DENT209	Professional Ethics	2
DENT220	Dental Office Management	2
DENT226	Dental Pharmacology	1
DENT233	Laboratory Procedures	2 3
DENT270	Clinical Training/Practicum II	3
Related Studies(5 hours)		
AH113	Medical Terminology <sup>1</sup>	2
CSA150	Computer Fundamentals <sup>1</sup>	3
ENG111		3
PSYC101	Introduction to Psychology 1	3
SPCH111	Public Speaking <sup>1</sup> - or-	3
SPCH112	Interpersonal Communication <sup>1</sup>	3
Note: <sup>1</sup> Dental Assistant prerequisite courses of AH113, CSA150, ENG111, MATH075, PSYC101, and SPCH111 or SPCH112 must be completed prior to entrance into the program. AH113 and Math075 were previously offered s BIO103 and MATH105 respectively.		

Program Requirements(37	hours	)
-------------------------	-------	---

#### DENT103 COURSE DESCRIPTION:

# **Dental Materials**

5;(3,4)

This course is to acquaint the dental assistant student with the composition, properties and manipulation of dental materials with a primary emphasis on those materials used in the dental office and a secondary emphasis on selected materials used in the dental laboratory. These properties include the physical, chemical, biological and mechanical properties of dental materials. Lectures, reading assignments, and laboratory projects will provide a basic understanding of dental materials used in the dental office and an overview of selected materials used in the dental laboratory. This information permits the student to interpret the use of dental materials in clinical practice and to communicate the use of materials with the dental materials. The utilization of all dental materials, mixing techniques, and safety protocol will be covered in the lab portion of the class. The importance of infection control, prevention of cross contamination and competency in uses and functions of dental materials will be emphasized. Care and maintenance of equipment and supplies will be demonstrated.

Prerequisites: Successful completion of 1<sup>st</sup> semester classes in the Dental Assistant Program. Corequisites: DENT170, DENT226, DENT233.

# Learning Outcomes:

- 1. Explain the purpose of the OSHA hazard Communication Standard
- 2. Explain the purpose of the material safety data sheets
- 3. Describe in general how chemicals should be stored
- 4. List the properties of dental materials and ways that they affect their application
- 5. Identify the types of dental restorative materials.
- 6. Identify dental standards and organizations responsible for those standards.
- 7. Identify the role of the dental assistant.
- 8. Identify the properties of dental materials.
- 9. Illustrate knowledge and skill utilizing various types of dental cements; explain their properties, composition, uses and manipulation.
- 10. Demonstrate steps of cavity preparation.
- 11. Demonstrate the composition of composite resins and amalgam restorations

Preventative Dentistry/Oral Health Care 1;(1,0)

#### DENT109 COURSE DESCRIPTION:

The dental assistant in the dental healthcare system emphasizes the basic concepts of disease prevention and health promotion. Communication and behavior modification skills are presented to facilitate the role of dental assistant as educator.

Prerequisites: AH113, CSA150, ENG111, MATH075, PSYC101, and SPCH111 or SPCH112. Corequisites: DENT118, DEBT119, DENT128, DENT145, DENT160 AND DENT167.

- 1. Correctly cite the components of a comprehensive preventive dentistry program.
- 2. Discuss patient education on removal of plaque, proper tooth brushing method, and selection of home care aids.
- 3. Identify accurate fluoride needs assessment
- 4. Develop proper analysis of a food diary.
- 5. Apply topical fluoride gel or foam.
- 6. Assist patients with dental floss.
- 7. Identify the role of nutrition in oral health.

- Discuss the primary nutrients and their role in overall oral health. 8.
- Correctly interpreting nutrition label facts and claims made about "organic" foods. 9.
- 10. Identify characteristics of anorexia and bulimia.
- 11. List the guidelines for healthy eating habits and the Food Guide Pyramid.

### **DENT118**

#### **Dental Assisting**

3;(2,2)

This course includes a detailed study of dental instruments, their care and function. Also included is the study of the different dental procedures and techniques on assisting, which includes practice of ergonomics with each procedure. This course consists of theory and practical lab application. As a routine procedure in the Dental Office, the student will study First Aid procedures. The general structure, composition, properties and purpose of dental materials will be covered.

Prerequisites: AH113, CSA150, ENG111, MATH075, PSYC101, and SPCH111 or SPCH112. Corequisites: DENT109, DEBT119, DENT128, DENT145, DENT160 AND DENT167.

# Learning Outcomes:

COURSE DESCRIPTION:

- Describe the design of a dental office explaining the purpose of each area. 1.
- 2. Explain the basic concepts of chair side assisting.
- Describe the necessary steps to prepare a patient for treatment. 3.
- Explain the necessary steps to seat the patient for treatment. 4.
- Describe the position of the operator and the assistant at chair side. 5.
- 6. Describe the necessary steps to dismiss the patients after treatment is concluded.
- Identify the special needs of certain patients. 7.
- Describe the grasp positions and transfer of instruments for a procedure. 8.
- Define and demonstrate how to maintain the oral cavity and the equipment utilized in 9. treatment of the oral cavity.

#### **DENT119 COURSE DESCRIPTION:**

# **Dental Terminology**

1;(1,0)

This course offers a systematic study of dental terms for health professional who need to acquire a medical vocabulary for their professional training. The student becomes proficient with prefixes, suffixes, and key words that formulate dental terms and the pronunciation of dental terms. Prerequisites: AH113, CSA150, ENG111, MATH075, PSYC101, and SPCH111 or SPCH112. Corequisites: DENT109, DEBT118, DENT128, DENT145, DENT160 AND DENT167.

# Learning Outcomes:

- 1. Identify words and abbreviations related to dentistry
- 2. List and identify structures of the dental terminology.
- 3. Pronounce the dental word.
- 4. Identify and understand terms related to dental professionals
- 5. Identify the dental facility operative equipment
- 6. Describe the terminology of head and neck anatomy and steps of cavity preparation and restorative procedures, as well as, dental materials.

# DENT128

**Community Field Experience** 

1:(0,2)

# COURSE DESCRIPTION:

The student provides a community service to district schools, and health clinics by providing dentagl health education. All health presentations will take place under direct supervision with expanded critique student performance.

Prerequisites: AH113, CSA150, ENG111, MATH075, PSYC101, and SPCH111 or SPCH112. Corequisites: DENT109, DEBT118, DENT119, DENT145, DENT160 AND DENT167.

# Learning Outcomes:

- 1. Identify promoting of Community based prevention strategies (Dental Public Health, an overview).
- 2. Discuss interventions and strategies for prevention and control of oral diseases and promotion of oral Health.
- 3. Identify motivation tips for oral hygiene care for each age group.
- 4. Evaluate and monitor dental care in district schools.
- 5. Demonstrate the five tooth brushing techniques.
- 6. Demonstrate types of dental floss as well as flossing and brushing techniques.
- 7. Identify benefits of using fluoride.
- 8. Discuss that nutrition is valuable in the profession of dental assisting.

# DENT145

# **Bio-Dental Science**

3;(3,0)

# COURSE DESCRIPTION:

The study of the normal function of external and internal structures of the teeth and oral cavity, including the study of general anatomy and physiology, embryology, histology, tooth morphology, and composition and classification of tissue of the head and neck. Includes the study of dental charting.

Prerequisites: AH113, CSA150, ENG111, MATH075, PSYC101, and SPCH111 or SPCH112. Corequisites: DENT109, DEBT118, DENT119, DENT 128, DENT160 AND DENT167.

# Learning Outcomes:

- 1. List the body systems, body planes and directions and cavities of the body and describe the structure and function of the cell.
- 2. List and identify the landmarks of the face and the oral cavity.
- 3. Identify the bones of the cranium and the face and identify the landmarks of the maxilla and mandible.
- 4. Identify the terms and times of the three prenatal phases of pregnancy.
- 5. Describe the life cycle of a tooth and identify the stages.
- 6. Identify the dental arches and quadrants using the correct terminology
- 7. Identify the surfaces of each tooth and their location.
- 8. Explain the groups of microorganisms and staining procedures used to identify them.
- 9. Identify and list the characteristics pertaining to bacteria, protozoa, rickettsia, and yeast molds and viruses.
- 10. Identify the methods of disease transmission and how to break the chain of infection.

#### DENT160 COURSE DESCRIPTION:

**Dental Radiology** 

4;(2,4)

The study and definition of radiation physics, health and safety theories with emphasis on fundamentals, the discovery and history of dental X-ray techniques and processing. Emphasis is on study and review for certification by the New Mexico Board of Dentistry Radiology before student participates in Clinical Training/Practicum I. Includes dental laboratory techniques, introduction to recording and interpreting, utilizing manual and computerized systems.

Prerequisites: AH113, CSA150, ENG111, MATH075, PSYC101, and SPCH111 or SPCH112. Corequisites: DENT109, DEBT118, DENT119, DENT 128, DENT145 AND DENT167.

# Learning Outcomes:

- 1. Recognize the history of radiation and the use of the Hittorf-Crookes and Coolidge tubes.
- 2. Identify the properties of radiation and explain the biological effects of radiation exposure.
- 3. Identify the components of a Dental x-ray unit and explain the function of each component.
- 4. Illustrate the safety precautions to be utilized when using radiation.
- 5. Distinguish how an x-ray is produced.
- 6. Define the composition, sizes, types and storage of dental x-ray film.
- 7. Define intra-oral and extra-oral x-ray production.
- 8. Identify means of producing quality radiographs on a variety of patients.
- 9. Define and demonstrate the bisecting and paralleling techniques.
- 10. Define common production errors.
- 11. Pass the NMSBD

#### DENT167 COURSE DESCRIPTION:

#### **Oral Medicine**

2;(2,0)

Students will study oral pathology (diseases and causes) with emphasis on periodontal disease and periodontal charting. Topics will include recognition of signs and symptoms of medical emergencies, treatment for aiding patients in emergency situations, and review in CPR training. Prerequisites: AH113, CSA150, ENG111, MATH075, PSYC101, and SPCH111 or SPCH112. Corequisites: DENT109, DEBT119, DENT128, DENT145, DENT160 AND DENT160.

# Learning Outcomes:

- 1. Pronounce, define, and spell the Key Terms.
- 2. Identify the infective agent in the caries process.
- 3. Identify dental caries as an infectious disease.
- 4. Name and describe the tissues of the periodontium.
- 5. Identify and describe the two main types of periodontal disease.
- 6. Identify oral lesions.
- 7. Describe and identify diseases of the oral cavity.
- 8. Identify and understand microbiology and diseases of the oral cavity
- 9. Identify matrix systems for restorative.
- 10. Identify removable and fixed prosthodontics
- 11. Identify types of provisional coverage.
- 12. Identify dental implants.
- 13. Describe conditions related to endodontics, and oral surgery.
- 14. Identify pediatric dentistry, dental trauma.

#### DENT170 COURSE DESCRIPTION:

# **Clinical Training/Practicum I**

7;(0,14)

The student serves a non-paid practical clinical experience in the dental offices of qualified dentists. Direct faculty supervision and instruction is maintained in each facility with expanded critique of performance, and office management.

Prerequisites: Successful completion of 1<sup>st</sup> semester classes in the Dental Assistant Program. Corequisites: DENT103, DENT226, DENT233.

- 1. Demonstrate chair side assisting skills with dental procedures.
- 2. Successfully complete State board radiology exam.
- 3. Demonstrate quality and variety of skills in laboratory procedures.
- 4. Participation in overall patient care.

- 5. Enhancing the level of performance as the student progresses through the clinical phase of the program.
- 6. Maintaining a record (JOURNAL) of their activities at each clinical practice assignment.
- 7. Achieve 300 hours total of clinical experience performing the functions listed in the Dental Assisting Accreditation Standards.
- 8. Demonstrate punctuality and reliability for participating in all chair side functions administered by the Dental team.
- 9. Identify dental charting, the symbols and basic dental terminology.
- 10. Demonstrate patient dental charting.

#### DENT209 COURSE DESCRIPTION:

# **Professional Ethics**

2;(2,0)

An emphasis on development of professionalism for dental staff. Content will include oral communication, psychology, patient relations, problem solving skills, stress management, employment ethics. Emphasis on the diversities of civil and criminal law. Definition of "due care" and examples of malpractice and torts.

Prerequisites: Successful completion of first 2 semesters in the Dental Assistant Program. Corequisites: DENT220 and DENT270.

# Learning Outcomes:

- 1. Identify the dental office staff and their areas of responsibility.
- 2. Identify the difference between civil and criminal law.
- 3. Identify the Dental Practice Act and what it entails.
- 4. Identify due care and demonstrate examples of malpractice.
- 5. Identify the four areas of the American with Disability Act.
- 6. Identify employment strategies

#### DENT220 COURSE DESCRIPTION:

# **Dental Office Management**

2;(2,0)

This course introduces the student to the concepts of the business of dentistry as a service profession, dental team, and patient management, legal and ethical issues, and design and equipment placement in the office. In addition, the student will learn the effectiveness of communication, the key to patient success that includes document management and storage, written communication and telecommunication. Introduction to business office systems such as appointment management, recall, inventory, dental insurance, accounts receivable and accounts payable. Focus and accentuation on technology such as the paperless dental office with the use of the computer as a replacement for paper records.

Prerequisites: Successful completion of first 2 semesters in the Dental Assistant Program. Corequisites: DENT209 and DENT270.

- 1. Identify the dental office staff and their areas of responsibility.
- 2. Identify the business of dentistry as a service profession
- 3. Identify and establish practice goals and objectives.
- 4. Identify the proper procedure fro answering an in-coming call.
- 5. Classify the information every message should contain.
- 6. Demonstrate examples of the ways in which computers are used in the dental office.
- 7. Describe telephone and business office technology and its uses.

8. Explain ways in which effective patient scheduling can be accomplish in the dental office.

# DENT226

# **Dental Pharmacology**

1;(1,0)

# COURSE DESCRIPTION:

Introduction to safe administration and classification of drugs used in dentistry. Emphasis on common adverse reactions that can occur in drugs utilized with dental procedures.

Prerequisites: Successful completion of 1<sup>st</sup> semester classes in the Dental Assistant Program. Corequisites: DENT103, DENT170, DENT233.

# Learning Outcomes:

- 1. Identify the terms related to drugs, pharmacology, and medicines.
- 2. Identify the difference between drug brand names and generic names.
- 3. Identify the parts of a written prescription.
- 4. Illustrate knowledge for the drug laws and who enforces them.
- 5. Identify the schedules for the Comprehensive Drug Abuse Prevention and Control Act of 1970.
- 6. Identify the routes in which drugs can be administered.
- 7. Identify the uses and effects of tobacco, caffeine, alcohol, marijuana and cocaine.
- 8. Identify information about heroin, morphine, and codeine.
- 9. Illustrate knowledge about amphetamines.
- 10. Demonstrate an understanding of hallucinogenic drugs such as LSD, PCP and mescaline.
- 11. Demonstrate an understanding of barbiturates.
- 12. Demonstrate an understanding of the drugs used in dentistry and the ways in which they are used.
- 13. Identify homeopathic remedies

#### DENT233 COURSE DESCRIPTION:

# Laboratory Procedures

2;(0,4)

The student will study the management of hazardous materials that will include specialties and their associated laboratory procedures. Students will enhance and build skills and techniques of impression taking, construction of models and custom trays, and many other laboratory duties performed by the dental assistant.

Prerequisites: Successful completion of 1<sup>st</sup> semester classes in the Dental Assistant Program. Corequisites: DENT103, DENT170, DENT226.

- 14. Demonstrate skill and knowledge on tray set-up and identify instruments per procedure
- 15. Demonstrate skill in chairside assisting procedures suction, instrument transfer, mix materials per restorative procedures
- 16. Demonstrate dental charting
- 17. Demonstrate the knowledge and skills needed to prepare, take, and remove alginate impressions and wax bites.
- 18. Demonstrate the knowledge and skills necessary to prepare elastomeric impression materials such as polysulfide, silicone (polysiloxane and polyvinyl siloxanes), and polyether for the dentist.
- 19. Demonstrate the skills necessary to use gypsum
- 20. Demonstrate the knowledge and skills to pour and trim a patient's alginate impression.
- 21. Demonstrate the assembling of a matrix.
- 22. Demonstrate the fabrication of provisional coverage.

- 23. Demonstrate an understanding in specialty dentistry.
- 24. Demonstrate skill in coronal polishing
- 25. Demonstrate application of dental sealants.
- 26. Demonstrate skill and knowledge in orthodontic procedures and enamel sealants

#### DENT270 COURSE DESCRIPTION:

#### **Clinical Training/Practicum II**

3;(0,6)

This capstone course enhances the dental office experience enabling the student to serve as a non-paid practical clinical participant in the offices of qualified dentists. The student will practice chair side procedures as directed by dentists. Direct faculty supervision and instruction are maintained at each facility with expanded critique of performance and office management. Prerequisites: Successful completion of first 2 semesters in the Dental Assistant Program. Corequisites: DENT209 and DENT220.

- 1. Apply dental assisting techniques in the clinical setting.
- 2. Utilize the four handed dentistry techniques.
- 3. Demonstrate time management in dental assisting.
- 4. Identify intermediate and advanced chair side functions.
- 5. Apply dental assisting skills within various dental specialties.

# Assessment

Luna Community College defines assessment as a process that will lead to the improvement of student learning. The process must follow four steps as illustrated below.

# LCC Assessment Plan

All course offerings, including degree and certificate programs, at Luna Community College are required to follow the four-step assessment process. They include:

- 1. A list of expected learning outcomes
- 2. Assessment tools that directly measure those learning outcomes
- 3. The results of the data, and
- 4. How the data will be used to improve student learning

Academic Departments as Luna Community College are required to participate in semester "Improving Student Learning" assessment reporting and Student Learning Outcomes Assessment (SLOA) Committee presentations. Every semester, academic departments focus on specific learning outcomes with a targeted student population. Faculty are selected to participate in SLOA; selected faculty participate in developing assessment methods and procedures for their particular course or courses. The faculty give oral presentations at the end of the semester and information gathered is disseminated among SLOA members, faculty and staff. The purpose is to provide a baseline for future improvements.

Visit our web site at www.luna.edu to review LCC's Improving Student Learning (ISL) reports. LCC also abides by the New Mexico state competencies for general education.



Appendix "A"

# LUNA COMMUNITY COLLEGE

s	Standard "Minimal" Requirements for Course Syllabus
Course	course title and other course information including meeting times, dates, room number, credits, semester, prerequisites and/or co-requisites
Faculty	information about the instructor and his or her contact information (e.g., phone number and email). List time and day of office hours for full time faculty
Course Description	use catalog description, 2012-2015
Expectations of Students	What do you expect from your students?
	For example, description of students' responsibilities in the learning process; how you hope the students will approach the course subject/content; take responsibility for their learning; the amount of study time expected in the course, and suggestions on how to succeed in the course.
Course Learning Outcomes (Competencies) this section will include a list skills or techniques students develop from the course. This will consists of a minimum of to six quantifiable statements about what students will be a to do after completing the course.	
New Mexico CORE Competencies	If teaching a CORE course, the State HED competencies must be stated (e.g., Communications, Mathematics, Laboratory Science, Social & Behavioral Sciences, Humanities & Fine Arts).
Methods of Measuring Learning Outcomes (Competencies) outcomes?	What tools are used to measure student success based on the learning

Evaluation	Indicate how the student will earn a particular grade, such as information about assignments including types of assignments, nature of exams (e.g., take home, open book, in-class) due dates, grading criteria and so forth.
Course Schedule	Add a tentative schedule indicating the course content that will be covered throughout the course (e.g., eight week or sixteen week schedule).
Policies	Include policies such as attendance, academic responsibilities, late assignments, missed exams, cell phones, etc.
	Add a statement that indicates: for additional student information, refer to the 2012-2015 Student Handbook
Grading Standard	Refer to the LCC 2012-2015 Catalog
Textbook(s)	Name of required textbooks(s) and any recommended materials. Include ISBN number(s)
Important Dates	List important dates such as last day to withdraw from the course, holidays, add/drop, midterm, final exam week, spring break and other important dates.
ADA Statement	Add a statement regarding accommodations for students with disabilities. See Academic Policies & Procedures Manual 2012-2013 for additional information.
Academic Integrity	See Academic Policies and Procedures Manual 2012-2013 for additional information.
Syllabus Revisions or Changes	Add a statement that indicates the syllabus is subject to change

# Internet Courses

See Academic Policies & Procedures Manual 2012-2013 for additional information.