

Dental Assisting/Dental Hygiene (Integrated)

Credentials:

AAS	Dental Hygiene	68
Diploma	Dental Assisting	38-45

Description:

The Dental Assisting/Dental Hygiene Integrated Program is a program that prepares graduates to function as dental auxiliaries.

The Dental Assisting Program prepares the student to function effectively as an integral member of the dental health team and to perform chairside assisting and related office and laboratory procedures under the direction and supervision of a dentist. The curriculum includes content areas in general studies, biomedical sciences, dental sciences, clinical sciences, radiography, and clinical experience. Students must achieve a minimum grade of “C” in each Dental Assisting (DAS) course, Dental Assisting/Hygiene (DAH) course, and approved science courses. Upon completion of the program, students are eligible to take the Dental Assisting National Board Examination to become a Certified Dental Assistant.

The Dental Hygiene Program prepares the student to function as a dental hygienist on a dental auxiliary team under the supervision of a dentist. The curriculum includes content areas in general studies, biomedical sciences, dental sciences, clinical sciences, radiography, periodontology, and dental hygiene clinical experience. The program provides comprehensive educational experiences through lectures, clinical, and related study in order that graduates may apply scientific knowledge in the performance of dental hygiene procedures. Students must achieve a minimum grade of “C” in each Dental Hygiene (DHG) course, Dental Assisting/Hygiene (DAH) course, and approved science courses. Upon completion, graduates are eligible to apply to take the Dental Hygiene National Board Examination. As the only licensed dental auxiliaries, dental hygienists may be employed in dental offices, clinics, dental schools, public health and government agencies.

The Dental Assisting/Dental Hygiene Integrated Program is accredited by the Commission on Dental Accreditation, a specialized accrediting agency of the American Dental Association.

Implementation: Fall 2011

Competencies/Student Outcomes

AAS in Dental Hygiene

Upon completion of this program, the graduate can:

A. General Education Competencies

- I. Communicate Effectively
 1. Read and listen with comprehension.
 2. Speak and write clearly using standard English.
 3. Interact cooperatively with others using both verbal and non-verbal means.
 4. Demonstrate information processing through basic computer skills.
- II. Think Critically
 1. Make connections in learning across the disciplines and draw logical conclusions.
 2. Demonstrate problem solving through interpreting, analyzing, summarizing, and/or integrating a variety of materials.
 3. Use mathematics to organize, analyze, and synthesize data to solve a problem.
- III. Learn Independently
 1. Use appropriate search strategies and resources to find, evaluate, and use information.
 2. Make choices based upon awareness of ethics and differing perspectives/ideas.
 3. Apply learning in academic, personal, and public situations.
 4. Think creatively to develop new ideas, processes, or products.
- IV. Examine Relationships in Diverse and Complex Environments

1. Recognize the relationship of the individual to human heritage and culture.
2. Demonstrate an awareness of the relationship of the individual to the biological and physical environment.
3. Develop an awareness of self as an individual member of a multicultural global community.

B. Competencies shared by Dental Assistants and Dental Hygienists

1. Identify the professional role of members of the dental health team in terms of responsibilities and functions.
2. Demonstrate dental auxiliary and patient positioning.
3. Demonstrate plaque control using appropriate oral physiotherapy methods and materials.
4. Follow the current Occupational Safety and Health Administration/Center on Disease Control (OSHA/CDC) recommendations for control of blood borne pathogens and hazardous materials.
5. Explain the purposes of the complete dental and medical record and its component parts.
6. Obtain, interpret and evaluate personal, medical and dental histories and apply precautionary measures as needed.
7. Demonstrate the process for performing extraoral and intraoral examinations and recording the findings.
8. Describe the ways in which diet and nutrition can affect the overall health of the body and specifically of the oral cavity.
9. Explain properties and benefits of stannous, sodium and acidulated phosphate fluorides and demonstrate techniques for their application.
10. Explain the role of dental sealants in the prevention of oral disease.
11. Correctly follow tooth selection criteria for sealant placement and demonstrate accepted sequence in sealant placement.
12. Differentiate between the normal and abnormal appearance of tooth structure, supporting structures and anatomic landmarks on patient/dental radiographs.
13. Describe healthy periodontium related to clinical signs and histological characteristics.
14. Describe the nature and formation of dental plaque and its importance in the etiology of periodontal disease.
15. Identify categories of periodontitis as defined by the American Academy of Periodontology.
16. Describe the current treatment modalities of periodontitis.
17. Identify relationships among the various local, state, federal and international community dental healths programs, and discuss the role of the dental auxiliary.
18. Describe maintenance and care of oral appliances and demonstrate the removal of soft deposits.
19. Identify and explain the components of a drug prescription.
20. Describe the fetal development of gross anatomical structures of the face, oral and nasal cavities.
21. Identify all teeth and describe the functional anatomy of each.
22. Identify the relationships of teeth to one another and to the bones, muscles and nerves closely associated with the dentition.
23. Locate, classify and discuss the function of the salivary glands.
24. Relate the spread of infection to knowledge of oral tissue spaces.
25. Describe how x-rays are produced and their effect on radiographic film.
26. Describe biological effects of radiation including principles of radiation hygiene and protection.
27. Outline the geometric factors which affect the radiographic image.
28. Demonstrate the ability to expose, process and mount acceptable intraoral and extraoral radiographs.
29. Identify and discuss processing errors.
30. Outline the properties, indications and limitations of selected dental materials.
31. Assess patient's needs and select appropriate dental materials.
32. Manipulate common dental materials in both laboratory and clinical situations.
33. Interpret the rules and regulations of Kentucky State Dental Practice Act.
34. Describe the legal and ethical considerations of dental health practice.
35. Demonstrate the interviewing process in preparing for dental auxiliary employment.
36. Demonstrate basic management skills utilized in dental auxiliary employment.

37. State the reasons for continued professional development.
38. Discuss appropriate polishing agents and demonstrate the proper procedures for their use.

C. Competencies unique to Dental Hygiene

1. Demonstrate the process of performing a periodontal examination.
2. Describe, discuss and apply principles of instrumentation for examination and periodontal debridement procedures.
3. Assess patient data, develop and implement a dental hygiene treatment plan.
4. Demonstrate the maintenance of oral appliances and remove hard deposits by hand instrumentation.
5. Demonstrate clinical competency in the treatment of patients in relation to assessment, planning, implementation and evaluation (emphasizing periodontal conditions and special patient needs).
6. Demonstrate ultrasonic instrumentation.
7. Collect appropriate data to be utilized for differential diagnosis.
8. Explain the relationship between pathological conditions and their therapeutic agents.
9. Demonstrate the ability to select a patient for the clinical board examination who meets criteria established by the regional board examination agency.
10. Determine objectives, identify resources and discuss methods used to establish community dental health programs.
11. Interpret and utilize dental biostatistics and epidemiology data commonly used in community studies.
12. Administer local anesthesia and nitrous oxide.

Diploma - Dental Assisting

Upon completion of this program, the graduate can:

A. General Education Competencies:

I. Communicate Effectively

1. Read and listen with comprehension.
2. Speak and write clearly using Standard English.
3. Interact cooperatively with others using both verbal and non-verbal means.
4. Demonstrate information processing through basic computer skills.

II. Think Critically

1. Make connections in learning across the disciplines and draw logical conclusions.
2. Demonstrate problem solving through interpreting, analyzing, summarizing, and/or integrating a variety of materials.
3. Use mathematics to organize, analyze, and synthesize data to solve a problem.

III. Learn Independently

1. Use appropriate search strategies and resources to find, evaluate, and use information.
2. Make choices based upon awareness of ethics and differing perspectives/ideas.
3. Apply learning in academic, personal, and public situations.
4. Think creatively to develop new ideas, processes, or products.

IV. Examine Relationships in Diverse and Complex Environments

1. Recognize the relationship of the individual to human heritage and culture.
2. Demonstrate an awareness of the relationship of the individual to the biological and physical environment.
3. Develop an awareness of self as an individual member of a multicultural global community.

B. Competencies shared by Dental Assistants and Dental Hygienists

1. Identify the professional role of members of the dental health team in terms of responsibilities and functions.
2. Demonstrate appropriate professional behavior.
3. Demonstrate dental auxiliary and patient positioning.
4. Demonstrate operation of the operator and assistant stools, dental chair and unit.
5. Demonstrate positioning of the dental unit and patient relative to the clinician.
6. Demonstrate positioning zones relative to each treatment area.
7. Demonstrate plaque control using appropriate oral physiotherapy methods and materials.

8. Follow the current OSHA/CDC recommendations for control of bloodborne pathogens and hazardous materials.
9. Identify precautionary measures that must be taken by dental personnel to prevent disease transfer from patient to patient, patient to clinician, clinician to clinician, and clinician to community.
10. Explain the purposes of the complete dental and medical record and its component parts.
11. Obtain, interpret and evaluate personal, medical and dental histories and apply precautionary measures as needed.
12. Identify the patient record as a legal document and maintain its accuracy and consistency.
13. Use a complete, reviewed medical history and preoperative vital signs to help prevent, predict and identify medical emergencies.
14. Manage specific medical emergencies in response to given signs and symptoms.
15. Develop an emergency protocol for a given clinical setting and explain how it will be implemented in a variety of emergency situations.
16. Demonstrate the process for performing extraoral and intraoral examinations and record the findings.
17. Describe the ways in which diet and nutrition can affect the overall health of the body and specifically of the oral cavity.
18. Demonstrate patient education skills, emphasizing various plaque control techniques.
19. Select oral hygiene procedures, products and devices that specifically meet individuals' needs for plaque control.
20. Explain properties and benefits of stannous, sodium and acidulated phosphate fluorides, and demonstrate techniques for their application.
21. Explain the role of dental sealants in the prevention of oral disease.
22. Correctly follow tooth selection criteria for sealant placement.
23. Demonstrate the accepted sequence in sealant placement.
24. Differentiate between the normal and abnormal appearance of tooth structure, supporting structures and anatomic landmarks on patient/dental radiographs.
25. Describe healthy periodontium related to clinical signs and histological characteristics.
26. Describe the nature and formation of dental plaque and its importance in the etiology of periodontal disease.
27. Identify categories of periodontitis as defined by the American Academy of Periodontology.
28. Describe the current treatment modalities of periodontitis.
29. Define, recognize and recall the etiology of acute periodontal conditions.
30. Identify relationships among the various local, state, federal and international community dental health programs, and discuss the role of the dental auxiliary.
31. Identify, describe and obtain a patient's blood pressure, pulse rate, respiration and body temperature.
32. Describe maintenance and care of oral appliances and demonstrate the removal of soft deposits.
33. Describe therapeutic agents commonly used in the management of the dental patient.
34. Identify and explain the components of a drug prescription.
35. Describe the fetal development of gross anatomical structures of the face, oral and nasal cavities.
36. Identify the anatomic structures and landmarks of the oral cavity, face and nasal cavities radiographically, clinically and histologically.
37. Explain the embryological development of the teeth.
38. Identify all teeth and describe the functional anatomy of each.
39. Identify the relationships of teeth to one another and to the bones, muscles and nerves closely associated with the dentition.
40. Describe the nervous, vascular and lymphatic tissues associated with the oral cavity as they relate to the practice of a dental auxiliary.
41. Describe the muscles of facial expression and muscles of mastication as they relate to function.
42. Locate, classify and discuss the function of the salivary glands.
43. Relate the spread of infection to knowledge of oral tissue spaces.
44. Describe how x-rays are produced and their effect on radiographic film.
45. Describe biological effects of radiation.
46. Identify radiation hygiene and protection.
47. Outline the geometric factors which affect the radiographic image.
48. Demonstrate the ability to take acceptable intraoral and extraoral radiographs.
49. Identify oral radiographic landmarks.
50. Process dental radiographs.
51. Identify and discuss processing errors.

52. Mount radiographs.
53. Outline the properties, indications and limitations of selected dental materials.
54. Assess patient's needs and select appropriate dental materials.
55. Manipulate common dental materials in both laboratory and clinical situations.
56. Interpret the rules and regulations of Kentucky State Dental Practice Act.
57. Describe the legal and ethical considerations of dental health practice.
58. Demonstrate the interviewing process in preparing for dental auxiliary employment.
59. Demonstrate basic management skills utilized in dental auxiliary employment.
60. State the reasons for continued professional development.
61. Perform coronal polishing.
62. Discuss appropriate polishing agents and demonstrate the proper procedures for their use.

C. Competencies unique to Dental Assistants

1. Demonstrate clinical proficiency in selection and transfer of instruments in operative dentistry.
2. Maintain access and visibility during clinical dental assisting procedures.
3. Perform/assist with intraoral procedures.
4. Demonstrate clinical proficiency in the preparation, manipulation and application of various dental materials as applicable to dental assisting.
5. Integrate dental assisting skills and transfer them effectively and efficiently to public and/or private dental settings.
6. Prepare tray setups for specialty dental procedures.
7. Apply the principles of chairside assisting to each specialty area.

Outlines:

**Associate in Applied Science
Dental Hygiene**

<u>Course Prefix</u>	<u>Course Number</u>	<u>Course Title</u>	<u>Credit Hours</u>
General Education Courses			
ENG	101	Writing I	3
ENG	102	Writing II	3
BIO	137	Human Anatomy & Physiology I	4
BIO	139	Human Anatomy & Physiology II	4
BIO	225	Medical Microbiology	4
PSY	110	General Psychology	3
SOC	101	Introductory Sociology	3
MAT	110	Applied Mathematics OR	3
MAT	150	College Algebra and Functions	(3)
		Oral Communications	3
		Heritage/Humanities	3
		Subtotal	33
Integrated Classes			
DAH	101	Infection Control and Medical Emergencies	2
DAH	121	Dental Sciences	3
DAH	124	Materials in Dentistry	2
DAH	131	Oral Pathology	3
DAH	135	Oral Radiology	2
DAH	235	Practice Management	1
		Subtotal	13
Dental Hygiene Only Classes			
DHG	120	Pre-Clinical Dental Hygiene	3
DHG	130	Clinical Dental Hygiene I	3
DHG	132	Pharmacology	2
DHG	134	Dental Nutrition	2
DHG	136	Periodontology	1

DHG	220	Clinical Dental Hygiene II	4
DHG	226	Advanced Periodontology	2
DHG	230	Clinical Dental Hygiene III	3
DHG	238	Community Dental Health Issues	2
			Subtotal
			22
			Total Credit Hours
			68
Elective			
DHG	221	Local Anesthesia and Nitrous Oxide Sedation	2

Program Title: Diploma – Dental Assisting

<u>Course Prefix</u>	<u>Course Number</u>	<u>Course Title</u>	<u>Credit Hours</u>
Program Related Classes			
BIO	135	Basic Anatomy & Physiology with Laboratory OR	4
BIO	137	Human Anatomy & Physiology I AND	(4)
BIO	139	Human Anatomy & Physiology II	(4)
		Three credits from Writing/Assessing Information, Oral Communications, Humanities or Heritage	3
PSY	110	General Psychology *	(3)
			Subtotal
			7-14
Integrated Classes			
DAH	101	Infection Control and Medical Emergencies	2
DAH	121	Dental Sciences	3
DAH	124	Materials in Dentistry	2
DAH	131	Oral Pathology	3
DAH	135	Oral Radiology	2
DAH	235	Practice Management	1
			Subtotal
			13
Dental Assisting Only Classes			
DAS	120	Dental Assisting I	6
DAS	130	Seminar I	2
DAS	220	Dental Assisting II	9
DAS	230	Seminar II	1
			Subtotal
			18
			Total Credit Hours
			38-45

Dates of Actions:

Approved: October 1998

Revised: December 2002, October 2004, May 2007, December 2009, May 2010, February 2011