

FUNDAMENTALS OF DENTAL EDUCATION

THE DEAN VAUGHN TOTAL RETENTION SYSTEM®

COURSE OUTLINE

The *Dean Vaughn Total Retention System*® applied to *Fundamentals of Dental Education* is designed to be the fastest and most effective method to teach the most used Greek and Latin medical word parts used in the practice of dentistry, as well as the anatomical names and locations of the teeth, mouth, and throat, supporting structures of the teeth, and dental nomenclature. It works in conjunction with the natural learning process of the brain by converting dental terminology and anatomy into images of real and familiar objects that make it incredibly easy to learn and remember program content.

MATERIALS

Fundamentals of Dental Education consists of the following components:

- Ten lessons of video instruction
- Facilitator Resource
- Student Learning Guide

ASSIGNMENTS

As active learners in *Fundamentals of Dental Education*, students will be expected to:

- Complete the Pre-test to establish a basis for measuring individual accomplishment
- View and carefully participate (i.e., pronouncing the dental term, location or anatomical part, audionym and meaning along with the narrator, visualizing the audionym and its association) in the video presentation for each lesson
- Complete all associated learning guide activities for each lesson
- Perform a final review of dental terminology, anatomy, and nomenclature
- Complete the Final Test to assess Fundamentals of Dental Education knowledge and understanding

OBJECTIVES

On completion of *Fundamentals of Dental Education* students will be able to:

- Identify the structure of dental terminology and recognize word roots, prefixes, suffixes, and combining forms
- Understand that the meaning of most complex dental/medical terms is derived by analysis of simpler components or word parts
- Identify the anatomical names and locations of the teeth, supporting structures, and parts of the mouth and throat
- Understand dental nomenclature and identify the numbering of teeth
- Complete a final test and achieve a percentage score of 70 percent or better

LESSON 1—INTRODUCTION & DENTAL TERMINOLOGY

View Lesson 1 Video Presentation

- Introduction to the Dean Vaughn Total Retention System™
- Structure of medical terminology
- Combining vowels and forms
- Dental Terminology – Prefixes, Roots, and Suffixes

gingiv-	-ectomy	odont-	alveol-	-algia
-itis	path-	-ology	dent-	lingu-
or-	peri-	micr-	arthr-	-ologist
cyst	hyper-	sub-	trans-	-trophy

Perform Lesson 1 Review – including Learning Guide Exercises

LESSON 2—DENTAL TERMINOLOGY

View Lesson 2 Video Presentation

- Dental Terminology – Prefixes, Roots, and Suffixes

pre-	labi-	gloss-	-osis	bucc-
auto-	cervic-	odyn	traum-	neo-
later-	-desis	calc-	antr-	-plast
otomy-	ost-	-vulse	stom-	top-

Perform Lesson 2 Review – including Learning Guide Exercises

LESSON 3—DENTAL TERMINOLOGY

View Lesson 3 Video Presentation

- Dental Terminology – Prefixes, Roots, and Suffixes

macr-	macro-	ab-	vestibul-	radi-
gen-	fistul-	ex-	cut-	end-
benign	inter-	-lysis	myel-	-an-, a-
centesis-	gemin-	hemi-	grad-	intra-

Perform Lesson 3 Review – including Learning Guide Exercises

LESSON 4—DENTAL TERMINOLOGY

View Lesson 4 Video Presentation

- Dental Terminology – Prefixes, Roots, and Suffixes

ante-	cephal-	dys-	hypo-	infra-
mall-	gram-	esthesia	malign-	lith-
retro-	radic-	en-	ostomy-	sinus
physio-	pro-	post-	-plasia	-pexy

Perform Lesson 4 Review – including Learning Guide Exercises

LESSON 5—TOOTH ANATOMY / PARTS OF A TOOTH

View Lesson 5 Video Presentation

- Important Words / Elements

-ist -al apic-, apex pulp

- Anatomy of a Tooth / What a Tooth Looks Like

enamel cementum dentin pulp cavity neck, cervical line
root canal pulp canal root, radic crown, coron pulp chamber
apex, apic

Perform Lesson 5 Review – including Learning Guide Exercises

LESSON 6—SUPPORTING STRUCTURES OF THE TEETH

View Lesson 6 Video Presentation

- Important Words / Elements

lig- -ment mandible condyle menisc-

- Supporting Structures of the Tooth

mandible condyle temporal menisc- zygomatic/malar
maxilla ligament gingiva alveolar bone meniscus
sinus/antrum alveolus

Perform Lesson 6 Review – including Learning Guide Exercises

LESSON 7—DENTAL TERMINOLOGY

View Lesson 7 Video Presentation

- Important Words / Elements

fren- palat sial- doch- parotid

- Anatomy of the Mouth and Throat

labial oral cavity buccal lingu- gloss
palate (hard) frenula vestibule velum palate (soft)
larynx pharynx trachea parotid duct sub-mandibular gland
sub-lingual parotid gland sub-mandibular
gland duct

Perform Lesson 7 Review – including Learning Guide Exercises

LESSON 8—PREFIXES USED IN DENTAL TERMINOLOGY

View Lesson 8 Video Presentation

- Prefixes

uni- bi- tri- quadr-

- Important Words / Elements

quadrant	sext-	sextant	hemi-	semi-
pan-	ante-	pro-	pre-	post-
retro-	hyper-	hypo-	non-	sub-
peri-	periapical	periodontal	intra-	im-, in-
end-	intraoral	intracoronal	endodontist	implant
impaction	ex-	exostosis	extra oral	anesthesia

Perform Lesson 8 Review – including Learning Guide Exercises

LESSON 9—DENTAL PHYSIOLOGY – FUNCTION OF THE TEETH AND THE SUPPORTING STRUCTURES

View Lesson 9 Video Presentation

- Important Words / Elements

gnath- occlud-, cid- de- menisc-
occlus

- Dental Physiology

temporo- mandibular joint	occlusal function	pharynx	pulp cavity	vestibule
oral cavity	larynx	alveolus	antrum	dental arch
alveolar arch	lingual arch	palatal arch	dentition	

Perform Lesson 9 Review – including Learning Guide Exercises

LESSON 10—THE TEETH: DENTITION

View Lesson 10 Video Presentation

- Important Words

lig- -ment mandible condyle menisc-

- The Teeth: Dentition

permanent dentition	mixed dentition	deciduous dentition
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- The Teeth: Names and Locations (Permanent Dentition)

canine, cuspid 2 nd molar	incisor (central) incisor (lateral)	1 st molar 3 rd molar, wisdom tooth	1 st pre-molar, 1 st bi-cuspid	2 nd pre-molar, 2 nd bi-cuspid
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- The Teeth: Numbers, Letters, and Locations
- The Teeth: Identified by Groups

quadrant	anterior teeth	posterior teeth
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- The Teeth: Surfaces

proximal distal	lingual	labial	buccal	mesial
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Perform Lesson 10 Review – including Learning Guide Exercises

CONCLUSION

- Perform complete *Fundamentals of Dental Education* review
- Final Test

SAMPLE GROUP REVIEW QUESTIONS

The following questions are provided to reflect the range of material covered throughout Fundamentals of Dental Education and as an additional resource to instructors (i.e., course planning and implementation, grant proposals).

Q What are the basic word parts of elements that form most medical terms used in the practice of dentistry?

A The three basic word parts or elements are the prefix, root, and suffix.

Q In medical terminology, what primary purpose does the combining vowel serve?

A The combining vowel is primarily used between two or more elements of a medical term to make the term easier to pronounce.

Q Name the branch of dentistry that is the study of the supporting and surrounding tissues of the teeth and specializes in the prevention, diagnosis, treatment, and maintenance of the function and health of the tissue?

A The branch of dentistry concerned about the supporting and surrounding tissues of the teeth and specializing in the prevention, diagnosis, treatment, and maintenance of the health and function of the tissue is periodontics.

Q What is the pulp of a tooth?

A The pulp of a tooth is the juicy tissue contained within the pulp chamber at the center of the tooth.

Q Identify and describe the three parts of a tooth?

A The three parts of a tooth are the crown, root, and cementum. The crown represents the largest part of the tooth that is visible. The root (or roots) are the foundation of the tooth that is below the gumline. The cementum is the layer of hard, protective tissue that covers the outer surface of the root(s).

Q Identify and describe enamel?

A The enamel of a tooth is the very hard, bone-like covering of the crown of the tooth.

Q What is the medical term for the cheekbone?

A The medical term for the cheekbone is the zygomatic bone or zygomatic malar.

Q Identify four types of teeth?

A

- Incisors
- Canines
- Premolars
- Molars

Q What is the primary function of molars?

- A The molars are also used primarily for chewing and grinding food.
- Q How many incisors does the adult human have? Where are they located?
- A The adult human has eight incisors. They are located at the front of the mouth – two on each side, top and bottom.
- Q How many teeth does the normal adult mouth have?
- A The normal adult mouth has 32 teeth.