

Career Exploration in Dentistry

Syllabus

» Course Overview

This course introduces students to the exciting and varied career opportunities in the dentistry profession, from dental assistants all the way up through oral surgeons. Students will review the history of dentistry globally and in the U.S., and will learn key dental terminology. The course will introduce the roles and tasks done as well as the skills and education required of nearly every member of the dental staff. Students will gain an understanding of what it takes to perform each position, and how they work together.

» Course Outline by Module

Module 1	Paths to Dentistry	Module 6	Community Dental Health
Module 2	Dental Assistant	Module 7	Dental Administration
Module 3	Dental Hygienist	Module 8	College Preparation, the Dental Admissions Test, and Dental School
Module 4	Dental Laboratory Technicians	Module 9	General Dentistry
Module 5	Dental Products	Module 10	Dental Specialties

» Module Overview and Learning Objectives

| Module 1. Paths to Dentistry

In this module, we are going to look at the painful history of dentistry both across the world and in the United States. We'll identify prominent historical figures who made strides in the dental field. Then we'll look at the dental team today. We'll discuss the roles of each member of the dental team and look at the skills and traits needed to be successful in each role.

Career Exploration in Dentistry

Syllabus

Learning Objectives: In this module, students will:

- Construct the timeline of dental history
- Identify prominent historical figures
- Describe the progression of dentistry in the United States
- List members of the dental team
- Analyze the range of skills, competencies, and professional traits required for careers in dental sciences
- Develop a presentation on the history of dentistry that includes graphs, technology, and supporting evidence

| Module 2. Dental Assistant

This module will familiarize students with the roles and responsibilities of a dental assistant. Students will learn what a typical day is like for a dental assistant and what their expectations are. They will also be introduced to some dental terminology, the universal dental numbering system, and basic chairside assisting. Finally, the requirements and educational requirements to become a dental assistant will be reviewed. All students will gain an appreciation for this essential piece of the dental team.

Learning Objectives: In this module, students will:

- Classify the roles and requirements of a dental assistant
- Define key dental and medical terminology related to a dental assistant's role
- Determine the meaning of the universal dental numbering system's name; then, number the teeth located in the human dentition on a model or chart. Explain the difference in each of the numbering systems as presented in text by paraphrasing them in simpler yet accurate terms
- Demonstrate the proper grasps and transfers associate when chairside assisting with a dentist
- Identify the requirements, education, and licenses necessary to become a dental assistant

Career Exploration in Dentistry

Syllabus

| Module 3. Dental Hygienist

Dental hygienists are in high demand! This module will introduce you to the field of dental hygiene. First, we will outline the roles and requirements of a dental hygienist. We will go over the basic anatomy of teeth and their functions. We will also discuss preventative dental care explaining what it is and why it's so important. This module will also provide an overview of some of the basic instruments used by dental hygienists. Finally, we will end the module with a more in depth look at what is required to become a registered dental hygienist.

Learning Objectives: In this module, students will:

- Classify the roles and requirements of a dental hygienist
- Define key dental and medical terminology related to a dental hygienist's role
- Formulate a written and digital health education project to inform an audience about the parts and functions of teeth. Include the effects of nutrition on tooth development and continuous good health and dental prevention care
- Describe the use of dental instruments and equipment
- Identify the requirements, education, and licenses necessary to become a dental hygienist

| Module 4. Dental Laboratory Technicians

Dental laboratory technicians get to work with their hands to build all kinds of interesting dental appliances. In this module, students will learn more about what it is a dental laboratory technician does every day. The module will also cover basic terminology related to the industry. To help students get farther along the path to having a career as a dental laboratory technician, the module will include information about the education and licensure required. Finally, it will look at current opportunities in the industry, and students will practice applying for such positions.

Career Exploration in Dentistry

Syllabus

Learning Objectives: In this module, students will:

- Classify the roles and requirements of a dental laboratory technician
- Define key dental and medical terminology related to a dental technician's role
- Describe the dental products made by the dental laboratory technician
- Examine how technologies such as CAD/CAM and 3-D Printing are utilized in dentistry
- Identify requirements, education, and licenses required to become a dental laboratory technician
- Using real-time and projected labor market data, identify local and national employment opportunities and determine areas of growth. Complete a job application, resume, and cover letter for one of the jobs located in the search

Module 5. Dental Products

Robots, 3D printing, and virtual reality are just some of the technologies that are changing countless industries and field. The dental field is no exception. In this module, students will learn about the products in dentistry, including up-and-coming technologies. Students will get a closer look at some of the companies leading the revolution in changing the industry with their products. Finally, the module will provide an overview of some of the careers related to developing and selling dental products.

Career Exploration in Dentistry

Syllabus

Learning Objectives: In this module, students will:

- Identify the 10 dental product categories defined by the ADA, and provide an example of each
- Examine a company that makes dental products
- Research emerging dental technologies related to dental and oral health, including but not limited to procedures, equipment, and diagnostics tools
- Outline the process of dental product development and create a product advertisement for a dental product
- Define and give examples of Digital Dentistry and explain how it can help a dental practice run more efficiently and improve patient care
- Identify careers related to developing and selling dental products

| Module 6. Community Dental Health

Millions of Americans do not have access to good dental care. That is where a community dental health coordinator comes in to play. This module will look at this new and emerging role in the dentistry. Students will learn what the position entails and some of the must-know terminology. The module will also look at some of the ethical issues in dentistry.

Learning Objectives: In this module, students will:

- Classify the roles and requirements of a community dental health coordinator
- Define key dental and medical terminology related to a community health dental coordinator's role
- Discuss the reasons affecting access to dental care in the U.S. and explain how a community health dental coordinator can help improve access to care
- Describe the role of a dental therapist and its impact on access to care
- Examine the Hippocratic Oath and explain how it applies to dentists and other dental professionals
- Evaluate ethical dilemmas in the dental profession
- Choose an ethical issue affecting dental health professionals and discuss how this issue has affected or will affect the dental community

| **Module 7. Dental Administration**

It takes more than a dentist and some assistants to make a dental office a success. In this module, students will look at the importance of dental administration. It will provide an overview of office management. Then students will get a better idea of how insurance factors into dentistry. This portion will include understanding the American Dental Association's codes with dental insurance and the cost of private dental insurance plans vs. government-issued plan. Students will also understand what HIPAA is and why it matters. Finally, the module will go over various electronic medical record software systems.

Learning Objectives: In this module, students will:

- Classify the roles and requirements of office management
- Explore the use of American Dental Association's (ADA) codes with dental insurance
- Describe the regulations of HIPAA
- Recognize various electronic medical record software systems
- Compare and contrast the average cost of private dental insurance plans versus government-issued plans
- Create an advertisement for a dental office, describing the practice and the services offered

| **Module 8. College Preparation, the Dental Admissions Test, and Dental School**

Applying to dental school can be a daunting task. This module will help students understand the process now, so they can develop a road map for the future. First, the module will describe the Dental Admissions Test and how to prepare for that test. Next, it will look at the interview process. Finally, it will take a closer look at some of the dental schools in the USA. The module will provide an overview of the cost, facilities, faculty, and location.

Career Exploration in Dentistry

Syllabus

This module will explore the many questions around the possibilities of war in space. We will also look into how robots are or could be used, for both exploration and warfare.

Learning Objectives: In this module, students will:

- Explain the best ways to prepare for dental school while in high school and college, including courses of study and extracurricular activities
- Describe the Dental Admissions Test and best practices for preparing for the test
- Conduct a mock dental school interview with a parent or teacher
- Collect information on 3 dental schools and compare programs based on cost, facilities, faculty, and location
- Evaluate how to finance dental school

| Module 9. General Dentistry

This module will look at the requirements and responsibilities of a dentist. Students will be exposed to some of the terminology related to a dentist's role. The module will look at the differences and similarities between a general dentist and a public health dentist. Finally, students will learn the education and licenses necessary to become a dentist..

Learning Objectives: In this module, students will:

- Classify the roles and requirements of a dentist
- Define key dental and medical terminology related to a dentist's role
- Explain the role of a public health dentist
- Identify the requirements, education, and licenses necessary to become a dentist
- Discuss challenges and drawbacks of the dental profession
- Evaluate the importance of diversity in the dental profession
- Compare dentist salaries to other dental and medical professions and calculate an average dentist's salary in your state and compare it to the annual cost of loan payments on dental school debt
- Compare owning a dental practice vs. working for a dental practice management organization

Career Exploration in Dentistry

Syllabus

| Module 10. Dental Specialties

Orthodontist, endodontist, oral surgeon, periodontist, pedodontist, prosthodontist... most people have a hard time pronouncing most of those specialties, let alone defining them! This module will help students understand the different specialties within dentistry. They will learn what additional education requirements are necessary to specialize and what specializing costs in terms of a financial investment. Finally, students will research a dental specialty procedure and develop a written explanation of the procedure.

Learning Objectives: In this module, students will:

- Compare the cost and additional education required to obtain licensing as a specialist
- Explain the role of an orthodontist
- Discuss the impact new business models are having on the orthodontist profession
- Explain the role of an endodontist
- Explain the role of an oral surgeon
- Explain the role of a periodontist
- Explain the role of a pedodontist
- Evaluate the unique challenges of pediatric dentistry versus general dentistry
- Explain the role of prosthodontist
- Research a dental specialty procedure (such as oral surgery, prosthetic dentistry, or gingivoplasty), then develop a written or verbal explanation of the procedure using correct dental terminology