



Course Prefix/Number/Title: DHYG 134 Dental Anatomy Lab

**Number of Credits: 1** 

**Course Description:** This lab course provides the dental hygiene students the opportunity to examine the location, anatomy, morphology and form and function of each tooth in the permanent and primary dentitions in a lab and/or clinical setting through group and individual activities. Angle's Classification of Malocclusion will also be studied. Appropriate infection control techniques and safety precautions required in a dental setting will be implemented.

# **Pre-requisites:**

- DENT 116 Dental Anatomy Lecture
- Acceptance into the dental hygiene program

# **Course Objectives:**

- 1. Locate and identify the divisions and associated surface landmarks of the oral cavity on a diagram and/or a patient.
- 2. Identify each permanent tooth according to its location, anatomy, morphology, and function on a typodont or intraorally.
- 3. Identify each primary tooth and identifying landmarks on a typodont.
- 4. Relate form to function for each type of tooth.
- 5. Identify the key concepts of occlusion on a diagram, a dentition model, and/or a patient.

# **Dental Hygiene Student Learning Outcomes addressed in this course:**

- 1. Provide patient centered, comprehensive, evidence-based dental hygiene care to a diverse socioeconomic, educational, and cultural patient population.
- 2. Apply the principles of professional and ethical standards in providing dental hygiene care to individuals of all populations.
- 3. Exhibit professionalism and communicate effectively with patients, coworkers, and other healthcare professionals.
- 4. Engage in professional activities and lifelong learning.

# **Dental Hygiene Program Outcomes**

- 1. Prepare highly qualified dental hygiene professionals by providing up-to-date, high quality academic and clinical dental hygiene education.
- 2. Provide a competency-based education.
- 3. Provide students with opportunities for interprofessional community health promotion.
- 4. Earn and maintain full accreditation status according to the Commission on Dental Accreditation.
- 5. Incorporate emerging technologies to enhance quality dental hygiene care.
- 6. Prepare students to engage in professional activities and lifelong learning.

Instructor: Rhonda Edwardson, M.Ed., RDH, CDA

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## **Course Schedule:**

This course meets 2 hours twice per week for 8 weeks in the biolab, simulation lab, or clinic. This course has 32 contact hours.

Students must wear clinic attire.

# **Textbook(s):**

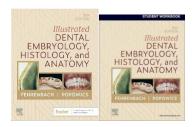
(Textbooks are also used in DENT 116 Dental Anatomy course.)

**Required:** Fehrenbach, M., Popowics, T. 2026. *Illustrated Dental Embryology, Histology and Anatomy*.

6<sup>th</sup> Ed. St. Louis, MO. Elsevier. ISBN: 978-0-443-104244

Optional: Fehrenbach, M., Popowics, T. 2026. Student Workbook for Illustrated Dental Embryology,

*Histology and Anatomy.6*<sup>th</sup> Ed. St. Louis, MO. Elsevier. ISBN: 978-0-443-10425-1



## **Course Requirements:**

The student must earn at least a 75% to pass this course with a "C" or above.

The student must participate in weekly lab activities, assignments and clinical exams.

#### **Tentative Course Outline:**

#### **Fall Semester**

Week 1	Introduction to course and Overview of Dentitions /Numbering Systems
	Orofacial Structures / Peer Lab - Orofacial Structures
Week 2	Exam – Dentitions, Numbering, Orofacial Structures
	Maxillary Incisors
Week 3	Mandibular Incisors
	Canines
Week 4	Exam – Incisors and Canines
	Premolars
Week 5	Molars
	Exam – Premolars and Molars
Week 6	Exam - Identification Final all teeth
	Primary Dentition
Week 7	Occlusion
	Peer Lab- Oral Structures / Teeth / Occlusion
Week 8	Exam – Primary & Occlusion
	Dental Charting and Eaglesoft charting case study

Course updated for DCB by R.Edwardson August 2025

General Education Competency/Learning Outcome(s) <u>OR</u> CTE Competency/Department Learning Outcome(s): Employs industry-specific skills for workplace readiness.

#### Relationship to Campus Focus: Nature, Technology, and Beyond

Dakota College Bottineau dental programs are designed to prepare students to meet the needs of communities by applying evidence-based decision making, using cutting-edge technology, and integrating quality and safety competencies into their dental programs. Each course within the program serves as a foundation for clinical practice in the dental assisting and dental hygiene professions. To meet the demands of the every-changing field of dentistry, students are taught to value life-long learning.

#### **Classroom Policies:**

Attendance is mandatory in all lectures, labs and clinical sessions.

## Grading

Course and lab/clinic grades are based on a variety of activities and assignments designated by the faculty. The criteria by which grades for each lecture and clinical course are included in the course syllabus distributed to students. Students have access to and should review the learning management system grading calculation method.

Students are responsible to know what their grades are during the course. Please review the gradebook frequently. If an assignment or exam in the student's gradebook says the assignment or exam has not been submitted or has not been entered, it is then treated as a fact the student didn't do the assignment or exam as outlined in the directions. Make sure your assignments are submitted before the due date to assure timely submission. Please see your Dakota Dental Program handbook for grading policies, in addition to the policies listed below.

## Grades

Students must earn a minimum grade of "C" with a maintained 2.0 GPA or better in all required dental program courses. Students who fail a theory or lab/clinical course will be dismissed from the dental assisting program. A final grade of "D" or "F" is considered to be a failed grade. If a student has unsatisfactory grades, he/she should contact the instructor as soon as possible for a remediation plan.

**Assignments/Tests/Labs/Clinics:** All assignments must be completed and submitted on time in the manner specified by the faculty. Students may fail the course if all assignments are not completed.

**Late/makeup work:** Late work will not be accepted (student will receive a zero) unless previously arranged with the instructor or impacted by extenuating circumstances. Upon approval, if an assignment is turned in within one week of the due date, there will be a 5% deduction from the assignment grade. Extenuating circumstances will be evaluated by the faculty for the course.

**Late tests:** If the student fails to take a test on time, he/she will need to contact the instructor to arrange a time to take the exam. There will be a 10% deduction from the test grade, for tests taken late. If a test isn't taken within a week of the test date, you will receive a zero for that test. Extenuating circumstances will be evaluated by the faculty for the course.

This course will be evaluated by:

Graded Lab Activities and Assignments	Points Possible
Tooth Numbering Worksheets	100
Oral Cavity Lab activity	30
Oral Cavity Identification Worksheet	40
Max. Incisors Lab activity	30
Mand. Incisors Lab activity	30
Canine Lab activity	30
Premolars Lab activity	30
Molars Lab activity	30
Primary Dentition Lab activity	30
Primary Dentition worksheet	30
Occlusion Lab activity	30
Peer Lab #2 worksheet	30
<b>Total Points Possible</b>	440

Lab Tests	<b>Points Possible</b>
Exam 1 - Dentitions, numbering, Orofacial structures	25
Exam 2 - Incisors and Canines	20
Exam 3 - Premolars and Molars	20
Exam 4 - Permanent Tooth Identification	40
Exam 5 - Primary and Occlusion	15
<b>Total Points Possible</b>	120

# This course grade will be calculated by the number of points attained out of the number of points possible.

Dental program students must achieve a final grade of "C" or above to continue in the program.

The following grade scale will be used:

A	92 - 100	
В	84 - 91	
С	75 - 83	
D	67 - 74	
F	Below 67	

# **Classroom Etiquette:**

- Be punctual to lectures, labs and clinics
- Avoid any activity that may cause distraction during class.
- Incivility will not be tolerated
- Use of mobile devices and related applications and cameras are not allowed to be used, unless it is for a class activity.
- Children are not allowed in the classroom.

# **Active Learning:**

In addition to educational strategies such as reading, listening and reflecting, when appropriate this class makes us of learning techniques commonly known as active learning. Students should expect to participate in active learning techniques such as discussions and presentations, small group activities, writing, problem-solving, case studies, role-playing, etc. These activities promote analysis, synthesis, and evaluation of class content in order to improve Specific Instructional Objectives.

## **Course Study Expectations:**

Commitment to learning is important to success. For every semester credit you are taking in a class, (e.g., 3 credit course = 9 hours per week) the student should schedule three hours to read, study, and devote to your course, outside of class.

## **Attendance Policy:**

The Dakota College Dental Programs support the college policy on attendance as stated in your college catalog. The dental programs implement strict attendance policies for classroom, lab and clinical experience. Students are expected to attend all lecture, lab and clinical hours. (See the Attendance Policy in the Dental Program Handbook)

Regular, punctual attendance demonstrates professional behavior and responsibility. Absences may make it impossible for a student to meet course objectives and result in failure of the course. A student may be excused from class, lab or clinic with the approval of the instructor. It is the student's responsibility to make arrangements to fulfill missed assignments with the appropriate faculty member. All makeup work may have a deduction in lecture, lab or clinic. All missed hours in lab or clinic must be made up with one hour for each hour missed. If a student has more than 25% absence in any classroom, lab or clinic session, it may result in course failure. If you must be absent, (e.g., illness) please inform the instructor as soon as possible. The instructor's contact information is on the first page of this syllabus.

#### **Questions:**

If you have questions or need clarification on anything to do with this course, please reach out to the instructor. The instructor can be reached by the contact information on the syllabus.

## **Student Email Policy:**

Dakota College at Bottineau is dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

## **Academic Integrity:**

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

## **Disabilities or Special Needs:**

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

#### Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the

College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.

Topic Schedule

Week and	<b>Specific Instructional Objectives</b>	Topic	Lab Activity
Course Objectives			Bring textbook, work book & typodont to each lab
Week 1 Obj. 1	<ol> <li>Assign correct tooth numbers.</li> <li>Describe types and functions of teeth.</li> <li>Locate and identify the divisions and associated surface landmarks of the oral cavity on a diagram and/or a patient.</li> </ol>	Overview of Dentitions and tooth numbering. Orofacial structures.	Complete worksheet identifying oral structures from Ch. 2. ( <b>Print</b> lab checklist from BB prior to lab.)
Week 2 Obj. 2, 4	<ol> <li>Demonstrate the correct location of each permanent incisor on a diagram, a skull, and/or a patient.</li> <li>Identify the permanent incisors and their general features and discuss their clinical considerations, integrating it into patient care.</li> <li>Describe the general and specific features of the permanent incisors and discuss the clinical considerations concerning them, integrating it into patient care.</li> </ol>	Permanent Incisors	Identify each permanent incisor according to its location, anatomy, morphology, and form and function on a typodont or intraorally. ( <b>Print</b> checklist from BB prior to lab.)
Week 3 Obj. 2, 4	<ol> <li>Describe the general and specific features of the permanent canines and discuss their clinical considerations, integrating it into patient care.</li> <li>Assign the correct names and universal or international tooth number for each permanent canine on a diagram or a tooth model or a patient.</li> <li>Demonstrate the correct location of each permanent canine on a diagram, a skull, and/or a patient.</li> </ol>	Permanent Canines	Identify each permanent canines according to its location, anatomy, morphology, and function on a typodont or intraorally using the checklist provided.
Week 4 Obj. 2, 4	<ol> <li>Assign the correct names and universal or international tooth number for each permanent premolar tooth on a diagram and a tooth model or a patient.</li> <li>Demonstrate the correct location of each permanent premolar tooth on a diagram, a skull, and/or a patient.</li> <li>Identify the permanent premolars and their general features and discuss their clinical considerations, integrating it into patient care.</li> </ol>	Permanent Premolars	Identify each permanent premolars according to location, anatomy, morphology, and function on a typodont or intraorally using the checklist provided.

Week 5 Obj. 2, 4	or interreperman a tooth.  2. Identify general clinical patient.  3. Describ features discuss	the general and specific s of the permanent molars and the clinical considerations them, integrating it into	Permanent Molars	Identify each permanent molars according to its location, anatomy, morphology, and function on a typodont or intraorally using the checklist provided.
Week 6 Obj. 3	number diagram  2. Discuss clinical dentitio  3. Describ teeth an	primary teeth properties and the considerations for primary n, integrating it into patient care. The the general features of primary deach primary tooth type as the specific features of each	Primary Dentition	Identify the correct location of primary teeth on a typodont. Discuss the general and specific features of primary teeth.  Print the checklist on BB and bring to lab. Complete the worksheet on mixed and primary dentition.
Week 7 Obj. 3, 5	classific patient conside parafun  2. Identify division malocol  3. Demonst	strate an initial occlusal ion on a patient and record	Occlusion	Using the checklist on BB, identify key concepts of occlusion on a diagram, typodont and/or patient.
Week 8 Obj. 2, 3, 5	<ol> <li>Underst charting</li> <li>Recogn restorat</li> <li>Demonstrate</li> </ol>	iand the purpose of dental g. ize and record various dental ions and conditions. strate proper charting for g, mixed and permanent dentition	Dental Charting	Complete Eaglesoft case study on dental charting.