1. COURSE ID: DENT 701  TITLE: Dental Science I
   Units: 3.0 units  Hours/Semester: 48.0-54.0 Lecture hours
   Method of Grading: Letter Grade Only
   Recommended Preparation: BIOL 130, and Eligibility for ENGL 100

2. COURSE DESIGNATION:
   Degree Credit
   Transfer credit: none

3. COURSE DESCRIPTIONS:
   Catalog Description: (Formerly DENT 731) This course offers an introduction to the basics of dentistry. This course covers subjects of importance to current or potential dental assisting student, including tooth numbering systems, oral anatomy, tooth morphology, tooth structures, oral embryology, oral histology, dental caries, periodontal diseases, oral pathology, disease prevention techniques and nutrition as it affects the oral cavity. (This course is offered in the Fall only.)

4. STUDENT LEARNING OUTCOME(S) (SLO'S):
   Upon successful completion of this course, a student will meet the following outcomes:
   1. Define & label the landmarks of the face and oral cavity.
   3. Identify the causes of periodontal disease and its progressive process.
   4. Identify the causes of dental caries and the caries process.
   5. Demonstrate why nutrition is an important part of oral hygiene.
   6. Identify the importance of, causes of, and conditions of oral pathology.

5. SPECIFIC INSTRUCTIONAL OBJECTIVES:
   Upon successful completion of this course, a student will be able to:
   1. Define & label the landmarks of the face and oral cavity.
   3. Identify the causes of periodontal disease and its progressive process.
   4. Identify the causes of dental caries and the caries process.
   5. Demonstrate why nutrition is an important part of oral hygiene.
   6. Identify the importance of, causes of, and conditions of oral pathology.

6. COURSE CONTENT:
   Lecture Content:
   1. Landmarks of the Face and Oral Cavity
      A. Regions and features of the face
      B. Identification & landmarks of & within the oral cavity
      C. Dentitions
         a. Permanent/Adult
         b. Deciduous/Baby
      D. Names, sizes, surfaces, locations, and types of teeth
      E. Tooth numbering systems
         a. Adult = numbers
         b. Children = letters
         c. Three systems: Universal, Palmer, & ISO
      F. Anatomic Features of the teeth
         a. Embrasures
         b. Contacts
         c. Angles and Divisions of the teeth
         d. Occlusion and Malocclusions
   2. Oral Embryology and Oral Histology
      A. Prenatal development of the teeth
B. Embryonic development of the face and oral cavity
C. Structures formed by specialized cells at specific weeks of development
D. Genetic factors vs. environmental factors
E. Growth periods of a tooth
F. Eruption cycle of teeth, permanent and primary
G. Layers of a tooth
   a. Enamel
   b. Dentin
   c. Cementum
   d. Pulp
   e. Root
   f. Crown
      i. Clinical crown
      ii. Anatomical crown
H. Periodontium
   a. Periodontal ligaments
   b. Alveolar bone
   c. Cementum
   d. Attachment apparatus
   e. Gingival unit
3. Dental Caries
   A. Caries process
   B. Progress of decay
   C. Causes
   D. Treatments
   E. Tooth brushing and flossing techniques
   F. Oral Hygiene instructions
   G. Prevalence in children
   H. Prevalence in adults
   I. Access to care
4. Periodontal Disease
   A. Identification of this disease
   B. Causes
   C. Progression of periodontal disease
      a. Type I: Gingivitis
      b. Type II: Early Perio Disease
      c. Type III: Mod Perio Disease
      d. Type IV: Advanced Perio Disease
      e. Type V: Refractory Perio Disease
   D. Non-surgical treatments
   E. Surgical treatments
   F. Increased oral hygiene techniques at home
   G. More frequent cleanings at the dental office
   H. Referral to periodontist
5. Nutrition
   A. Food Guide Pyramid
   B. Carbohydrates
   C. Fats
   D. Proteins
   E. Recommended Dietary Allowances (RDA's)
   F. Water
   G. Vitamins
   H. Minerals
      I. Diet Modification
      J. Reading food labels
   K. Eating disorders
   L. Healthy habits
6. Oral Pathology
   A. Oral Lesions
      a. Extending above the surface
b. Extending below the surface
c. Even with the surface
d. Raised or flat lesions

B. Diseases of the oral soft tissues
   a. Lichen Planus
   b. Candidiasis
   c. Aphthous Ulcers
   d. Cellulitis

C. Oral Cancer
   a. Appearance
   b. Biopsy
   c. Warning signs
   d. Dental implications of chemotherapy
   e. Treatment of oral cancer

D. HIV in relation to Oral pathological conditions in the mouth

7. REPRESENTATIVE METHODS OF INSTRUCTION:
   Typical methods of instruction may include:
   A. Lecture
   B. Other (Specify): Worksheets that compliment the lectures, power point presentations with accompanying
      handouts, videos, labeling assignments, color coding assignments, group work, and workbook assignments.
      Students will be assigned chapter readings from the textbook which correlate with the subject being
      discussed.

8. REPRESENTATIVE ASSIGNMENTS
   Representative assignments in this course may include, but are not limited to the following:
   Writing Assignments:
      Workbook assignments and worksheets are assigned that relate to the topic being discussed.
   Reading Assignments:
      Students will be assigned chapter readings from the textbook which correlate with the subject being
      discussed.

9. REPRESENTATIVE METHODS OF EVALUATION
   Representative methods of evaluation may include:
   A. Class Participation
   B. Exams/Tests
   C. completion and scoring on written homework assignments, lecture review quizzes, participation in group
      work and group assignments

10. REPRESENTATIVE TEXT(S):
    Possible textbooks include:

    Origination Date: December 2014
    Curriculum Committee Approval Date: November 2015
    Effective Term: Fall 2016
    Course Originator: Beth LaRochelle