COMMON COURSE OUTLINE: Course discipline/number/title: DA 1250: Dental Science II

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 2 hours lecture, 2 hours lab
3. Prerequisites (Course discipline/number): Grade of “C” or better in DA1210
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

This course is a course with four separate focuses. Introduction to anatomy and Physiology will include an overview of the body layout and each body system. Dental Charting will teach the student how to correctly record patient information, chart oral conditions, and services rendered. Oral Pathology reviews disease processes and dental disease conditions. Dental Pharmacology reviews a study of common drugs and therapies used in dentistry.

B. DATE LAST REVISED (Month, year): April, 2012

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Introduction to Anatomy and Physiology
   a) General Plan of the Human Body
   b) The Cells
   c) Tissues
   d) Body Systems
      i. Skeletal System
      ii. Muscular System
      iii. Integumentary System
      iv. Nervous System
      v. Sensory System
      vi. Circulatory System
      vii. Respiratory System
      viii. Digestive System
     ix. Endocrine System
    x. Lymphatic System
   xi. Urinary System
   xii. Reproductive System

2. Dental Charting
   a) Purposes of Dental Charts
   b) Current Methods of Charting
   c) Parts of a Dental Chart
   d) Types of Tooth Representations
   e) Tooth Numbering Systems
   f) Cavity Classifications
   g) Basic Charting Terms
   h) Charting Color Indications
   i) Required Charting Content
   j) Charting Symbols
      i. Caries
      ii. Amalgams
      iii. Tooth Colored Restorations (composites and porcelains)
    iv. Restorations to be Replaced, Recurrent Decay
   v. Inlays, Onlays, Crowns and Bridges, Veneers and Post and Core
   vi. Implants, Space Maintainers, Partial Dentures, Full Dentures
   vii. Miscellaneous Charting Condition
   viii. Periodontal Charting
   k) Transcribing Patient Information
      i. General Information
      ii. Medical Information
      iii. Dental Exam Information
C. OUTLINE OF MAJOR CONTENT AREAS: Continued . .

1) Recording Services Rendered and Prescriptions
m) Correction of Charting Entries

3. Oral Pathology
   a) Terminology
   b) Body Defense Mechanisms
   c) Responses to Injury or Invasion
   d) Classification of Oral Lesions
   e) Tooth Development Disturbances
   f) Eruption/Post-Eruption Disturbances
   g) Dental Decay
   h) Periodontal Diseases
   i) Oral Soft Tissue Diseases
   j) Soft Tissue/Bone Developmental Disturbances
   k) Oral Neoplasm
   l) Oral Manifestations of Systemic Diseases
   m) Temporomandibular Joint Disorders
   n) Physical and Chemical Oral Injuries
   o) Nutritional Deficiencies

4. Dental Pharmacology
   a) Terminology
   b) Drug Regulation/Control
   c) Drug Safety Recommendations
   d) Drug References
   e) Drug Naming
   f) Prescription Writing
   g) Drug Administration Recommendations
   h) Drug Administration Methods
   i) Chemical Dependency/Drug Abuse Signs and Symptoms
   j) Dental Drugs Categorized by Use:
      i. Antibiotics, Anti-fungals
      ii. Corticosteroids
      iii. Analgesics
      iv. Anti-anxiety Drugs/Sedatives/Hypnotics
      v. Local Anesthetics
      vi. General Anesthetics
      vii. Antihistamines
      viii. Salivary Control Agents
      ix. Blood Flow Control Drugs
      x. Antiseptic Agents
      xi. Desensitizing Agents
      xii. Tooth/Tissue Germ Control Agents

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
   Introduction to Anatomy and Physiology
1. Define anatomy terms.
2. Describe body organization.
3. Locate body planes and cavities.
4. Describe cell structure and function.
5. Describe body tissues and their functions.
6. Describe the skeletal system structure and function.
7. Describe the muscular system structure and function.
8. Describe the intergumentary system structure and function.
9. Describe the nervous system structure and function.
10. Describe the sensory system structure and function.
11. Describe the circulatory system structure and function.
12. Describe the respiratory system structure and function.
13. Describe the digestive system structure and function.
D. LEARNING OUTCOMES (GENERAL): The student will be able to: Continued...

14. Describe the endocrine system structure and function.
15. Describe the lymphatic system structure and function.
16. Describe the urinary system structure and function.
17. Describe the reproductive system structure and function.

Dental Charting
1. State the purposes of accurate dental charts.
2. Identify current methods of charting.
3. Identify and describe the parts of a patient chart.
4. Describe the various styles of dental charts.
5. Describe correct chart storage.
6. Effectively employ the Universal, Palmer and International charting symbols.
7. Define the six classifications of cavity preparations.
8. Describe basic charting terminology.
9. Explain color indications used in charting.
10. List required charting content.
11. Identify charting symbols.
12. Chart caries.
13. Chart amalgam restorations.
15. Chart porcelain restorations.
17. Chart restorations to be replaced.
18. Chart inlays, onlays, crowns, bridges, stainless steel crowns, veneers.
19. Chart post and core, dental implants.
20. Chart space maintainers, partial and full dentures.
22. Chart periodontal conditions.
23. Transcribe patient general, medical and dental information.
24. Record services rendered.
25. Correct inaccurate charting entries.
26. Interpret dental chart entries.

Oral Pathology
1. Define pathology terms.
2. Describe body defense mechanisms.
3. Describe inflammation and repair.
4. Describe atrophy, hypertrophy, hypoplasia, and hyperplasia, neoplasia and necrosis.
5. Classify oral lesions.
6. Describe tooth development disturbances.
7. Describe eruption/post-eruption disturbances.
8. Describe dental decay.
10. Describe oral soft tissue diseases.
11. Describe soft tissue/bone development disturbances.
12. Describe oral neoplasms.
13. Describe oral manifestations of systemic diseases.
14. Describe chemical and physical oral injuries.
15. Describe temporomandibular joint disorders.
16. Describe the effect of nutritional deficiencies on oral structures.

Dental Pharmacology
1. Define Pharmacology terms.
2. Describe drug control regulation/control.
3. Describe drug references.
4. Describe prescription writing.
5. Describe drug administration recommendations.
D. LEARNING OUTCOMES (GENERAL): The student will be able to: Continued...
   6. Describe drug administration methods.
   7. Recognize chemical dependency/drug abuse signs and symptoms.
   8. Describe antibiotic drugs
   9. Describe corticosteroids
  10. Describe analgesics.
   11. Describe antianxiety drugs.
   12. Describe local anesthetics.
   13. Describe general anesthetics.
   15. Describe salivary control agents.
   16. Describe antiseptic agents
   17. Describe blood flow control agents.
   18. Describe desensitizing agents.
   19. Describe tooth/tissue germ control agents.

E. LEARNING OUTCOMES (MNCT): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
   1. Weekly written quizzes
   2. Dental charting quizzes (both Oral and Written)
   3. Final charting exam.
   4. Final written exams.
   5. Attendance

G. RCTC CORE OUTCOME(S) Addressed:
   ☒ Communication ☐ Civic Responsibility
   ☐ Critical Thinking ☐ Personal/Professional Accountability
   ☐ Global Awareness/Diversity ☐ Aesthetic Response

H. SPECIAL INFORMATION (if any):
   1. Special required supplies for Dental Charting include:
      a) Red and Blue colored pencils
      b) Erasers
      c) Pencils and pens