APPLICATION FOR CHANGE IN EXISTING COURSE: MAJOR & MINOR

1. Submitted by College of __Dentistry________________ Date 1-19-01________
Department/Division offering course ___Oral Health Science_________________

2. Changes proposed:
   (a) Present prefix and number_ CDS 815_____ Proposed prefix and number__ CDS 815______
   (b) Present Title_ Introduction to Clinical Dentistry_______________________________
       New Title __no change_________________________________________
   (c) If course title is changed and exceeds 24 characters (including spaces), include a sensible title
       (not to exceed 24 characters) for use on transcripts:
       _______________________________________________________________________
   (d) Present credits: ___ 4 _____ Proposed credits: ____ 3 _____
   (e) Current lecture:laboratory ratio___42 :18____ Proposed: ____34:15_____
   (f) Effective Date of Change: (Semester & Year)___Fall 2001_________________

3. To be Cross-listed as _________________      __________________________________
   (Prefix and Number)                             (Signature: Dept. Chair)

4. Proposed change in Bulletin description:
   (a) Present description (including prerequisite(s):
       This survey course presents an overview of patient examination and evaluation including techniques of
       examination, diagnostic procedures, preventive dentistry, infection control, charting and record keeping. This
       course will prepare students for subsequent clinical experiences. Lecture, 42 hours; laboratory, 18 hours.
   (b) New description:
       This survey course presents an introduction to the dental field of operation (operator), basic assisting
       procedures, preventive dentistry, infection control, application of sealants and oral isolation
       techniques. It is designed to prepare students to function in dental environments safely and efficiently
       and to prepare them for the school-based sealant experience offered in CDE 815, Fundamentals of
       Dental Public Health.
   (c) Prerequisite(s) for course as changed:_____N/A___________________________________

5. What has prompted this proposal? The positioning of other courses in the curriculum indicated a
   need for change in the content; therefore, a decrease in hours. 8 lecture hours and 3 lab hours will
   be moved into a 2nd year course, CDS 824 – Principles of Patient Management. Movement of these
   hours and content reduces redundancy of material by providing the content closer to the time the
   information will be used. The information will be immediately reinforced in clinic thus improving
   efficiency.

6. If there are to be significant changes in the content or teaching objectives of this course, indicate
   changes: removal of topics related to patient data collection, please see attached topic outline

7. What other departments could be affected by the proposed change? None
8. Will changing this course change the degree requirements in one or more programs?  
   X No ❑ Yes (If yes, attach an explanation of the change.)*

9. Is this course currently included in the University Studies Program? X No ❑ Yes (If yes, please attach correspondence indicating concurrence of the University Studies Committee.)

10. If the course is a 100-200 level course, please submit evidence (e.g. correspondence) that the Community College System has been consulted.

11. Is this a minor change? XNo ❑ Yes (NOTE: See the description on this form of what constitutes a minor change. Minor changes are sent directly from the Dean of the College to the Chair of the Senate Council. If the latter deems the change not to be minor, it will be sent to the appropriate Council for normal processing.)

12. Within the Department, who should be consulted for further information on the proposed course change?
   Name: _____Judy Skelton______________________ Phone Extension: __3-2796_______

Signatures of Approval:

   Department Chair/Division Chief: ___________________________ Date:___________
   Dean of the College: __________________________________________ Date:___________
   Date of Notice to the Faculty: __________________________________________
   **Undergraduate Council: __________________________ Date:___________
   **Graduate Council: __________________________________________ Date:___________
   **Academic Council for the Med. Ctr:________________________ Date:___________
   **Senate Council:________________________ Date of Notice to Univ. Senate:_________________

   ACTION OTHER THAN APPROVAL:____________________________________________

*NOTE: Approval of this change will constitute approval of the program change unless other program modifications are proposed.

**If applicable, as provided by the Rules of the University Senate.

The Minor Change route for courses is provided as a mechanism to make changes in existing courses and is limited to one or more of the following:
   a. change in number within the same hundred series;
   b. editorial change in description which does not imply change in content or emphasis;
   c. editorial change in title which does not imply change in content or emphasis;
   d. change in prerequisite which does not imply change in content or emphasis;
   e. crosslisting of courses under conditions set forth in item 3.0;
   f. correction of typographical errors. [University Senate Rules, Section III - 3.1]
A. CDS 815 Introduction to Clinical Dentistry

1) General Information

Course Directors and Faculty

Judy Skelton, Ph.D.  
Donald Falace, D.M.D.  
Paul Osborne, D.M.D.

Course Director  
323-5279  
323-4695

J. David Hardison, D.M.D.  
Robert Calmes, Ph.D.  
Richard Mitchell, Ph.D.

257-1317  
323-5736  
323-5495

Amy Simmons, B.S.  
Sue Humphrey, M.S.  
Eric Spohn, D.M.D.

257-1329  
323-1680  
323-1167

Robert Kovarik, D.M.D.  
257-2147

Semester: Fall 2001  
3 Credit-hours  
Required Course  
54 students enrolled

2) Purpose

Course Description and Overview

A. CDS 815 is a 3-hour course designed to introduce the first year student dentists to the clinical environment in which they will be providing patient care. The major components of this course include:

- Introduction to the equipment & instruments in the dental treatment area (operatory).
- Infection control for dentistry.
- How to begin to function as a dental clinician and dental assistant.
- Basic "four-handed" dentistry, ergonomics, and positioning of patient, operator and assistant.
- Basic clinical dental procedures including use of a dental mirror, isolation of the teeth with cotton rolls and rubber dam, application of dental sealants, assembling and transferring an anesthetic syringe, and mixing selected dental materials.

B. This course introduces basic dental procedures of learning to use basic dental instruments, learning positioning of the dental team and initial procedures in the use of instruments and materials related to application of dental sealants on children’s teeth.

C. The course is an introductory course which forms the foundation for several other courses as outlined above. It is the student’s job to attend all classes (lectures, laboratory and clinics) and to complete all Web-based lessons and quizzes. The faculty will provide information, demonstrate techniques, coach and provide feedback, facilitate learning and evaluate performance. The faculty will endeavor to provide an environment in which learning can occur in a constructive manner.

3) Course Goals and Competencies

A. Goals

The overall goal of this course is to prepare the first year student dentist for their initial experiences in providing dental care to patients. This course will provide the knowledge, skills and expected behaviors to equip the student to function as a clinician or dental assistant during their rotations in CDE 815 “The Dental Sealant Experience” and for the clinical clerkships in CDS 813, (Management I, Introduction to Management for the Dentist). Note: CDE 815 is directed by Dr. James Cecil and CDS 813 is directed by
Dr. John Kemper. This course will also serve as an introduction to CDS 824, the second year Oral Diagnosis course directed by Dr. Lynn Theiss.

The following is a list of more specific goals for the course that relate to the specific subjects within the course.

(1) Introduce the first year student dentist to the clinical environment in which they will begin to practice dentistry.
(2) Introduce the student dentist to the equipment, instruments and procedures which they will use to perform general dentistry procedures.
(3) Familiarize the beginning student with basic infection control procedures used to perform general dentistry.
(4) Introduce the student to sterilization and disinfection procedures used in the College’s dental clinics.
(5) Prepare the student to perform basic sealant procedures in preparation for the rotations in CDE 815 the “Sealant Experience.”
(6) Prepare the students to begin their dental clinical clerkships in CDS 813 Management I, “Introduction to Management for the Dentist.”

B. Related College Competencies

The following is a listing of the College Competencies which relate to material in this course.

Competency 2 Information Management and Critical Thinking

The new dentist must be able to acquire, analyze and synthesize information in a scientific, critical and effective manner.

Competency 3 Communication/Interpersonal Skills

The new dentist must be able to communicate effectively, both orally and in writing, with colleagues, other health care providers, staff, patients and the public.

Competency 4 Practice Environment

The new dentist must be able to manage the treatment environment of dental practice.

Competency 6 Examination of the Patient

The new dentist must be able to collect, record and evaluate the biological, psychological and social information needed to assess the patient’s oral and general health. This includes the ability to recognize and manage behavioral factors that affect oral health and use the information to implement strategies that facilitate the delivery of oral health care.

Competency 9 Community Involvement

The new dentist must be able to promote and improve the oral health of individuals, families and groups in the community.

Competency 10 Oral Disease Prevention and Oral Health

The new dentist must be able to provide care for patients of all ages that emphasizes prevention of oral disease and supports the maintenance of existing systemic and oral health.

Competency 19 Pediatric Dentistry

The new dentist must be able to assess and manage dental needs of children including those with special health care needs.

4) Outcomes
The following list describes the "outcomes" which the student is expected to achieve in this course.

A.  Describe the arrangement of the dental treatment area.
B.  Become familiar with the dental clinics and operatory in the College of Dentistry.
D.  Become familiar with and demonstrate techniques for preventing transmission of infectious diseases in dentistry.
E.  Become familiar with hazardous materials in dentistry and their proper handling and disposal.
F.  Become familiar with procedures to immunize health care workers.
G.  Understand basic defenses for cross-infection in dentistry.
H.  Demonstrate an understanding of housekeeping and waste management in dental practice.
I.  Be familiar with the exposure protocols.
J.  Understand and practice chair side infection control.
K.  Be familiar with the sterilization of dental instruments.
L.  Be familiar with the OSHA Hazard Communication Standard.
M.  Be familiar with the Hazard Communication Program related to materials used in the College of Dentistry.
N.  Be familiar with Material Safety Data sheets and be able to interpret them.
O.  Know where Material Safety Data Sheets (MSDS) are located and how to interpret them.
P.  Describe and demonstrate the zones of activity related to the patients chair.
Q.  Demonstrate an understanding of basic plaque, brushing and flossing techniques.
R.  Perform basic 4-handed dentistry procedures from the clinician’s and assistant’s position.
S.  Demonstrate cotton roll isolation techniques.
T.  Demonstrate the ability to apply dental sealants on patients.
U.  Prepare and transfer an anesthetic syringe.
V.  Assist with the application and removal of rubber dam and basic dental assisting procedures.
W.  Mix basic dental materials according to manufacturer’s directions.

5) Learning Resources

a.  Required Text

b.  Required Web-based Lessons
   The basic information for this course will be provided in three different formats: (classroom lectures, web-based lessons and on videotapes). To enter the CDS 815 Web portion of the course, go to the following URL on your browser,

   http://medteach.mccs.uky.edu/topclass/
enter your last name followed by the first initial of your first name, password is the letter “u” followed by the last 7 digits of your Social Security number. You can change your password after your first entry into the system.

If you have questions about access, contact Dr. Skelton at 323-2796.

The lessons are followed by laboratory (pre-clinical) or clinical sessions where particular skills or techniques are demonstrated, practiced by the student and evaluated by faculty or staff members. Student performance will be evaluated using written performance checklists, which will contribute to the course grade. See attached course schedule for a listing of dates, times, rooms, topics and faculty.

6) Evaluation Methods

A. Grading Scale

A = 90 – 100  
B+ = 86 – 89.9  
B = 80 – 85.9  
C = 75 – 80.9 (marginal)  
E = 74.9 and below (failure)

B. Evaluation Components

Evaluation of student performance will be measured in several different ways. There will be 3 major exams and exam 1 =25%, exam 2 = 25 % and exam 3 = 30%. Satisfactory completion of the performance checklists related to the clinical/laboratory activities will contribute to 10% of the overall grade in the course. The remaining 10% is based upon completion of all web-based lessons and evaluation exercises. (Note this is monitored electronically by the TopClass server and is available only to the course director.

C. Attendance Policy

Attendance is required for all scheduled activities in this course unless excused by the course director. Attendance may be monitored by unannounced pop quizzes or attendance sign-in sheets. If you are unable to attend class for any reason, please report this situation to Dr. Judy Skelton at 323-2796 and to anyone in student services at 323-6071. This is your individual responsibility! There will be a 1% reduction in the final grade for each unexcused absence form any class. It is expected that students will arrive on time for all scheduled activities. Students may leave the clinic/laboratory sessions when they have completed their assigned activities and with permission of their lab instructor.

D. Late Assignments Policy

All activities for laboratory/clinic course components are to be completed during the scheduled session. Opportunities to make up the session are extremely limited and are to be done only with permission of one of the course directors.

E. Missed/Make-Up Exam Policy

Exams are to be taken at the times scheduled. In the event of an excused absence from an exam, the student should contact the course director to arrange for a make-up exam. The Course Director will determine the time period within which the exam will be made up. The make-up exam may differ from the original exam.

F. Policy for Extra Credit Work/Remediation

Under extraordinary circumstances, as determined by the course director the student may negotiate extra work assignments as a remediation activity.

7) Policy and Procedures

a. Remediation Policy

If a student should fail a laboratory or clinic session and requires remediation, this will be completed by the student within 7 days by appointment with one of the 3 course directors. If the student should fail the course as a whole then a plan for
remediation may be developed with the course director and the APC Committee at the discretion of the course director. The last available path for completion of the course is a retake of the whole course the following year.

b. **Office Hours and Contacting Faculty**
   Normal office hours for faculty are 8AM to 500PM. You may contact faculty by phone or e-mail to arrange an appointment.
8) Instructional Sessions

1. **Introduction and Overview:** *Dr. Judy Skelton*
   
   Discuss the importance of well-designed and conveniently positioned dental equipment.
   
   - Locate and identify the standard dental equipment found in each dental treatment area.
   - Locate the master switch on the dental unit.
   - List the four major systems controlled by the master switch on the dental unit.

2. **Describe the Arrangement of the Dental Treatment Area** *Dr. Judy Skelton*
   
3. **Diseases of the Oral Cavity:** *Dr. Falace*

4. **Orientation to Clinic** *B. Farley and staff dental assistants*
   
   - Be familiar with the location of various clinical supplies, emergency and other equipment.
   - Be familiar with the location of disinfectants and other supplies required to prepare the operatory for patient care.
   - Be aware of the location of fire exits.
   - Be aware of procedures required to secure instruments and supplies from dispensary.
   - Know where dental assistant supervisor and staff dental assistants are located.

5. **Tour Clinic and Dental Treatment Area**

6. **Occupational Infectious Diseases I:** *Dr. Calmes*

7. **Occupational Infectious Diseases II:** *Dr. Calmes*

8. **Hazardous Materials:** *Mr. Cadle*
   
   - An overview of the OSHA Hazard Communication Standard;
   - The location of the site specific written Hazard Communication Program;
   - Location of the chemical inventory;
   - Location of the current MSDS;
   - How to read and understand labels and MSDS;
   - Physical or health hazards associated with the hazardous chemicals in the work area;
   - Work practices to follow to prevent over exposure to hazardous chemicals to include selection and use of personal protection equipment;
   - Procedures to follow in case of a spill;
   - Procedures to follow while performing non-routine tasks that may present a chemical exposure;
   - Documentation of training.

9. **Immunization of Healthcare Workers:** *Dr. Calmes*

10. **Defenses for Cross-Infection I:** *Dr. Calmes*

11. **Defenses for Cross-Infection II:** *Dr. Calmes*

12. **Housekeeping and Waste:** *Dr. Calmes*

13. **Describe and Demonstrate the Zones of Activity** *Ms Humphrey*

   - Using the clock concept, name and locate the zone of activity for:
     - the assistant
     - the clinician
     - instrument transfer
     - static (little or no activity)
   
   - Demonstrate the positions of the clinician and dental assistant in their activity zones.

   **Position the Patient and the Dental Assistant**
• Identify the controls on the dental chair and explain the function of each.
• Relate proper patient positioning to the principles of four-handed dentistry.
• Demonstrate seating the dental patient.
• Demonstrate proper dental chair positioning for treatment in the:
  − maxillary arch
  − mandibular arch
• Demonstrate dismissing the patient.
• Explain how proper assistant positioning enables the assistant to work comfortably and efficiently.
• Demonstrate proper stool adjustment.
• Demonstrate proper dental assistant seating.

**Position the Clinician**
• Explain how proper clinician positioning enables the clinician to work comfortably and efficiently.
• Demonstrate proper clinician seating and positioning

14. **Post-Exposure Prophylaxis, etc.: Dr. Calmes**

15. **Chairside Infection Control: Dr. Calmes**

16. **Introduction to Plaque, Brushing and Flossing: Ms. Humphrey**

17. **Describe Basic Instrument Design**
   • Describe the 3 basic parts of dental instruments.
   • Given a variety of dental instruments, identify each instrument’s:
     − handle
     − shank
     − working end
   • Differentiate between:
     − double-ended and single-ended instruments;
     − angled and straight shanks
     − bladed, blunt, or tipped working ends.
   • Identify and describe the basic instruments used in most dental procedures

B. **Transfer Instruments**
   • Demonstrate the transfer of hand instruments using the:
     − “walk-back” technique and
     − “baton-twirl” technique.
   • Demonstrate the transfer of:
     − dental handpieces and
     − double-handled instruments

**Maintain A Clear Operating Field**
• Recognize the techniques used to maintain a clear operating field.
• Demonstrate the use of the air/water syringe.
• Explain the importance of the washed field technique.
• Demonstrate grasp of the HVE tip using:
  − the palm-thumb grasp
  − modified pen grasp.
• Demonstrate retraction techniques using:
  − the mouth mirror,
  − your fingers, and
  − the HVE tip.
• Demonstrate adjustment of the dental light for treatment in the:
  − maxillary arch, and
  − mandibular arch.
• Demonstrate the placement of the HVE tip in the:
- maxillary right lingual area,
- maxillary left buccal area,
- mandibular right lingual area, and
- mandibular left buccal area.
  ▪ Demonstrate the placement of:
    - a mouth prop, and
    - a saliva ejector.

18. **Clinical Infection Control**: Dr. Calmes

19. **Instrument Sterilization**: Dr. Calmes

20. **Central Sterilization and PTS**: Dr. Calmes
    tour sterilization facilities

21. **Discuss Four-Handed Dentistry** Dr. Spohn, Ms Simmons

22. **Assist With Cotton Roll Isolation** Ms. Simmons
  ▪ State three indications for the use of cotton rolls for isolation.
  ▪ Discuss the advantages and disadvantages of cotton roll isolation.
  ▪ Demonstrate the assembly of cotton roll holders.
  ▪ Demonstrate the ability to assist the clinician with cotton roll isolation.

23. **Apply Sealants** Dr. Kovarik
  ▪ Describe the importance of pit and fissure sealants as both a preventive and therapeutic treatment.
  ▪ Describe the indications for the use of pit and fissure sealants.
  ▪ Demonstrate the ability to apply pit and fissure sealants.
  ▪ Evaluate the acceptability of a placed sealant.
  ▪ Discuss the rationale for pit and fissure sealants to a patient or guardian.

24. **Demonstrate Instrument Grasp and Finger Rest** Ms. Humphrey
  ▪ Describe and demonstrate the following:
    - pen grasp
    - modified pen grasp
    - palm grasp
    - finger rest
    - fulcrum
    - lateral pressure

25. **Demonstrate the Use of the Mouth Mirror** Ms. Humphrey
  ▪ Describe the functions of the mouth mirror.
  ▪ Demonstrate the use of the mouth mirror for indirect vision on the:
    - lingual of mandibular anterior teeth.
    - lingual of maxillary right posterior teeth.
    - lingual of maxillary anterior teeth.
  ▪ Demonstrate the use of the mouth mirror for illumination of the:
    - lingual of mandibular anterior teeth.
    - lingual of maxillary anterior teeth.
    - buccal of mandibular left posterior teeth.
  ▪ Demonstrate the use of the mouth mirror to retract the:
    - lips.
    - cheeks.
    - tongue.
  ▪ Demonstrate the use of the mouth mirror for transillumination of the teeth.

26. **Instrument, Grasps, Ergonomics and Illumination** Ms. Humphrey
- State the advantages of correct operator clinical positioning
- Outline proper clinical position, discussing seat height, seat back position and body position.
- Define repetitive strain injuries (RSI) including symptoms and discuss the frequent occurrence of these related to dentistry.
- Discuss the cause and symptoms of the following repetitive strain disorders.
  - Carpal Tunnel Syndrome
  - Thoracic Outlet Compression Syndrome
  - Surgical Glove-Induced Injury
  - Cubital and Ulnar Tunnel Syndrome
  - Extensor Wad Strain
  - Strained Pronator Muscle
- Describe neutral vs. non-neutral wrist positions during instrumentation.
- Define direct vision, indirect vision, illumination, transillumination as used in operative dental therapy.
- Differentiate between plane surface, front surface and magnifying mirror heads.
- State and describe the three types of instrument grasps. Name the one used most frequently in dentistry.
- Clinically demonstrate the position of the dental unit light to properly view maxillary and mandibular arches.
- Name two clinical benefits of the proficient use of transillumination.

27. Clinical Practice of Modules #1 - #7 and Session #25

28. Sealants Lecture: Dr. Kovarik
   *see session #24 above*

29. Lab: Dr. Kovarik et al.
   *see session #24 above*

30. Infection Control Exam I: Dr. Calmes

31. Exam II: Dr. Spohn

32. Tray Setups: Ms. Simmons
   - Understand the concept of standardized instrument tray setups and be familiar with the various tray setups used at the College of Dentistry.
   - Identify the instruments contained in specific tray setups

33. Prepare the Local Anesthetic Syringe: Ms. Simmons
   - Identify the parts of an
     - aspirating syringe,
     - anesthetic carpule, and a
     - disposable needle
   - Prepare an aspirating syringe for an injection.

   **Assist with the Administration of Local Anesthesia**
   - Describe the administration of topical and local anesthesia.
   - Prepare and apply a topical anesthetic.
   - Safely pass the assembled local anesthetic syringe.

34. Practice Syringe Assembly and Transfer: Simmons et. al.
   *clinical practice of sessions #34 & #35*

35. Practice Syringe Assembly and Transfer: Simmons et. al.
   *clinical practice of sessions #34 & #35*

36. Apply and Remove the Rubber Dam Dr. Osborne
   - Briefly discuss the rationale of rubber dam isolation.
   - Identify commonly used clamps by number and match them to the tooth or teeth they generally fit.
Demonstrate the ability to explain the rubber dam procedure to the patient.
Demonstrate the ability to select, place, and evaluate clamp position on the anchor tooth.
Demonstrate the ability to place and remove a rubber dam on a patient.
Differentiate between the rubber dam application procedures using winged and wingless clamps.

Assist with the Application and Removal of the Rubber Dam Dr. Osborne
- Explain the rationale of isolation techniques and the advantages and disadvantages of rubber dam isolation.
- Identify and describe the use of each instrument and material used in the application and removal of the rubber dam.
- Describe the uses for the different sizes and weights of rubber dam material.
- Prepare the rubber dam for application.
- Demonstrate the ability to assist the clinician with the application and removal of the rubber dam.

37. Practice Rubber Dam: Dr. Osborne et.al
Clinical practice of session #38

38. Dental Materials Dr. Mitchell et al.
- Identify and describe the use of common dental materials used in Restorative Dentistry.
- Demonstrate the ability to prepare common dental materials for use.