UKCD 1-Year Certificate in Implant Dentistry
Dear Doctor,

Thank you for your interest in our educational programs in Oral Implantology at UKCD. We are proud of our program. We believe that because of the diverse interests of our talented faculty, and because of the outstanding strengths of the University of Kentucky College of Dentistry (UKCD), we provide one of the premier training experiences in Oral Implantology.

We represent the University of Kentucky through the College of Dentistry Continuing Education Office. Our goals are professional and specialized training and continuing education programs in Oral Implantology. UKCD provides flexible educational opportunities. Continuing education courses are offered at every level of expertise. UKCD makes every effort to train individuals from diverse backgrounds or educational levels, offering courses from basic dental implant training to advanced levels of expertise in implant dentistry.

The 1-Year Implant Externship at UKCD provides courses in these categories:

1- One Year, multiple modules; courses leading to a certificate "Externship in Implant Dentistry (EID)".

2- Advanced implant courses: Sinus lifting, ridge preservation and augmentations, computer guided implant surgery, and other specialized specific topics in implant surgery and prosthetics.

The UKCD Implant Externship provides dentists with the best of unbiased, evidence based education and unparalleled hands-on experience. Our courses will enable participants to witness the benefits of academic courses rather than system-based dental implant training.

Once again, thank you for your interest. We look forward to receiving your feedback.

Best Wishes,

Dr. Ahmad Kutkut
Director of "Certificate in Implant Dentistry Program"
One Year, Multiple Modules, Dental Implantology Course for Dentists and Specialists.
Course Description:

This course is designed to introduce both the basic and advanced concepts and principles related to dental and oral implantology. The course will cover several topics, including historical perspectives, implant biomaterials, principles of placement, hard and soft tissue reconstructions, restorative principles, and maintenance. The information provided will be beneficial for those who seek professional structured training in implant dentistry.

Course Objectives:

The program is designed to offer the participants a systematic learning approach to implant dentistry.

Upon completion of this course, the participants should be able to:

- Select patients for implant surgery and restorations.
- Set treatment plans for implant cases and recognize possible local and systemic risk factors.
- Achieve a satisfactory degree of skill and confidence in standard implant placement.
- Choose the appropriate surgical and restorative approaches.
- Understand patient pre-and post-operative care.
- Implement dental implantology into their dental practices.
- Get practical tips on how to avoid common pitfalls and complications in oral implantology.
Course Highlights

- 100 continuing dental education hours.
- Participants will do live surgery on their own patients under direct supervision.
- Each candidate will be able to assist, witness and perform different implant cases and share experiences with mentors and colleagues during the treatment process.
- Problem based theory and practice learning.
- International distinguished speakers from different disciplines of implantology.
- Certificate of completion is awarded by UKCD.
- Non-commercial course covering the spectrum of implant types and systems without interest in any specific company.
- In-depth review of surgical and prosthetic protocols.
- Excellent review of fundamental sciences and treatment planning.
- Live hands-on training.
- Effective assessment cycle throughout the course, to enhance knowledge, skills, and attitudes.
- Evidence-based clinical approach.

Course policy

This is an academic course. It does not offer any special training on any commercial product. Suggested use of any commercial product does not necessarily reflect the philosophy or endorsement of a procedure or product by UKCD.

Course Prerequisite

No prior experience with dental implants is required.

Course Duration:

The course is a continuing professional education program comprised of five modules.
Course Content
The course is divided into five parts:

- The didactic part will be conducted in the form of lectures, group discussion, review of literature, and case presentations.
- Hands-on workshops will be conducted in the form of demonstrations and laboratory exercises and actual case discussions.
- Surgical and prosthetic demonstrations (live and video streaming).
- Mentorship clinical program where every participant will be able to do four implants, including diagnosis, treatment planning, performing surgical steps. Each Candidate will be able to witness and perform different implant cases and share experiences with mentors and colleagues during the treatment process.

Certificates:
Each participant will be awarded a certificate of "Externship in Implant Dentistry" from the University of Kentucky College of Dentistry.

Number of participants:
Limited to 10 participants a year.

Attendance requirements
Attendance at all lectures and clinical sessions is necessary and important for you to receive the certificate.

Tuition
The completed one-year course is $10,000, or $1500 for each Module 1 and 2, and $3000 for each module 3, 4, and 5.
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<th><strong>Module</strong></th>
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<td><strong>Module One</strong></td>
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<td>Interdisciplinary Treatment Planning for Implant Patients (Preclinical hands on)</td>
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<td>Prosthetic Implant Restoration for Implant Retained Mandibular Overdenture (Clinical hands on)</td>
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<td><strong>Module Five</strong></td>
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<td><strong>Module Five</strong></td>
<td>1.5 Days</td>
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**Total Working days** 12 Days
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✓ **MODULE 1**

September 9 – 10, 2016: Interdisciplinary Treatment Planning for Implant Patients (Preclinical hands-on)

- **Lectures (Friday)**
  - “Current Trends in Implant Treatment Planning”
  - “Implant Risk Management, Treatment and Prevention”
  - “Biomaterials and biomechanics”

- **Hands on (Saturday AM)**
  - Pre-surgical prosthetic planning and work-up sequence of implant candidates.
  - Fabrication of provisional prosthesis and providing template for the final restoration.

✓ **MODULE 2:**

October 7 – 8, 2016: A Simplified Technique for Dental Implant Placement (Preclinical hands-on)

- **Lectures (Friday)**
  - “CBCT in Implant Dentistry and Digital Treatment Planning”
  - “Guided Implant Placement and Loading Protocols in Implant Dentistry”
  - “Esthetic Integration in Incision Designs and Suturing Techniques”
  - “Review of current implant modalities – systems, configurations, surface treatments and enhancements”

- **Hands on (Saturday AM)**
  - Demonstration of placement of endosseous implants on Cadaver.
  - Practicing flap techniques and implant placement with different suturing techniques training on animal’s jaw.
MODULE 3:

PART I:
November 4 – 5, 2016: Extraction Socket Management (Clinical hands-on)
- Lectures (Friday)
  - “Extraction Socket Management, Ridge Alterations after Tooth Extraction”
  - “Integrating Technology and Biology in Bone Regeneration”
  - “Extraction Socket Preservation Techniques”
- Hands on (Saturday AM)
  - Attendees will bring their own patients and dental assistants to perform an atraumatic extraction and socket preservation graft

PART II:
January 27 – 28, 2017: Surgical Implant Placement Continuum (Clinical hands on)
- Lectures (Friday)
  - “Esthetic Consideration for Implant Restorations”
  - “Esthetic Provisionals and Abutment Selection for Final Restorations”
  - “Enhancement of Soft Tissue around Implants in the Esthetic Zone”
- Hands on (Saturday AM)
  - Attendees will bring their same previous patients and dental assistants to perform a surgical implant placement.
MODULE 4:

PART I:
February 24 – 25, 2017: Surgical Implant Placement for Implant Retained Mandibular Overdenture (Clinical hands-on)

- Lectures (Friday)
  - “Implant Prosthodontic Management Strategies for the Edentulous Patients”
  - “Soft Tissue Management around Implant”
  - “Management of Surgical and Prosthodontic Complications”
- Hands on (Saturday AM)
  - Attendants will be able to bring their own patients and dental assistants to perform alveoloplasty (if needed) and placing two implants in the anterior mandible using Straumann implant system

PART II:
May 19 – 20, 2017: Prosthetic Implant Restoration for Implant Retained Mandibular Overdenture (Clinical hands-on)

- Lectures (Friday)
  - “Implant Retained Overdenture Techniques”
  - “Strategies to develop predictable prosthetic outcomes”
  - “Advanced implantology: immediate loading principles and techniques”
- Hands on (Saturday AM)
  - Attendees will bring the same patients and dental assistants to perform prosthetic treatment using Locator system and perform intraoral pick up of the attachments into the denture.
MODULAR 5:

PART I:
March 24 – 25, 2017: Implant site development, clinical application for surgical techniques

(Clinical hands-on)

- Lectures (Friday)
  - “The Current Status of GBR: What are the Options?”
  - “Clinical application for regenerative biomaterials”
  - “Fundamentals of sinus graft, symphyseal grafts, ramus grafts”

- Hands on (Saturday AM)
  - Attendees will be able to bring their own patients and dental assistants to perform a guided bone regeneration using most current biological materials; bone graft and resorbable membranes

PART II:
June 23 – 24, 2017: Surgical Implant Placement Continuum

(Clinical hands-on)

- Lectures (Friday)
  - “Management of Mechanical Implant Complications”
  - “Surgical and Biological Complications in Implant Dentistry”
  - “How to Analyze Literature for Evidence Based Implant Dentistry”
  - “Comprehensive Review Examination”

- Hands on (Saturday AM)
  - Attendees will bring their same previous patients and dental assistants to perform a surgical implant placement using scientifically established implant system
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DETAILED COURSE OVERVIEW AND OBJECTIVES ON EACH MODULE

✔ MODULE 1:

Interdisciplinary Treatment Planning for Dental Implant Patients

Course Overview
Each participant will become familiar with the biologic and biomechanical basis of osseointegration, highlighting the interface between the implant surface, bone and soft tissue. The course will discuss the efficacy of CBCT imaging for use in implant dentistry. CBCT applications for implant planning, site assessment and treatment planning will be discussed including software enhancements, as well as the potential future improvements in CBCT implant imaging. The focus will center on pre-treatment diagnosis and identification of factors relevant to the selection and planning of dental implant patients. Each participant will become familiar with criteria for patient selection and factors that contraindicate care. Specific attention will be given to the categorization of patients according to the difficulty of treatment. The interrelationship between the members of the treatment team will be detailed and related to maximizing clinical outcomes while maintaining practice efficiency.

Course Objectives:
At the conclusion of this presentation, each participant should be able to:

- Review and become familiar with anatomy and biology as it relates to the placement and restoration of dental implants.
- Describe the interface between bone and currently used dental implants, with emphasis on the interaction between the surface morphology, implant component design and the bone response.
- Describe the biologic reactions of tissues (hard and soft) to surgery during treatment with dental implants with special consideration of healing factors capable of interfering with this process.
- Become familiar with the “team” concept of dental implant therapy, with particular reference to the comprehensive treatment planning of patients.
- Describe and recognize surgical and restorative indications and contraindications to dental implant therapy as part of an integrated treatment planning process.
- Understand the treatment planning factors associated with dental implants.
MODULE 2:

A Simplified Technique for Successful Dental Implant Placement

Course Overview
The second weekend is intended to concentrate on a simplified technique for successful placement of dental implants. Surgical field preparation protocol (asepsis and sterility) will be discussed relevant to implant placement. Pharmacological requirements, instrumentation and surgical techniques will be emphasized for the placement and post-surgical maintenance of dental implants. This session will include an overview on surgical considerations for esthetic implant restorations along with a live surgery to explore the flap design, soft and hard tissue managements, suturing technique, control of bleeding and actual implant placement. Potential surgical complications will be discussed along with mechanical and restorative potential complications. Preservation of soft tissue integrity and the blood supply will be discussed. This hands-on approach will advance the cases initiated in the treatment-planning weekend through implant placement in pig jaw surgery. Participation in the first weekend is a prerequisite for participation in the second weekend.

Course Objectives
- Observe live surgical implant demonstration on patient.
- Acquire information on site development surgery and prosthetics in the esthetic zone.
- Be introduced to bone grafting manipulation techniques, maxillary sinus augmentation (sinus lift), block graft and guided bone regeneration as part of site preparation for implant placement.
- Detailed flap design and suturing techniques will be covered as directly related to dental implant treatment.
- Esthetics and surgical considerations in the dental implant patient will be covered in detail as well as information on single implant restoration.
- Perform hands-on training practicing the flap design, osteotomy preparation to place an implant and suturing technique on pig jaws.
MODULE 3:

Extraction Socket Management and Surgical Implant Placement

Course Overview
Extraction socket preservation techniques can often prevent or minimize both alveolar ridge resorption and soft tissue collapse. Extraction socket preservation can facilitate implant placement in a proper restorative and high esthetic outcome. Atraumatic extraction with optimal socket management at the time of tooth removal can reduce or eliminate the future advanced ridge augmentation and guided bone regeneration procedures before implant placement. Moreover, poor extraction site management may lead to esthetic and functional prosthetic complications.

Learning Objectives:
The overall goal of this hands-on program is to provide the general dentist and specialists with evidence-based scientific information on extraction socket preservation techniques. The participants will be performing atraumatic extraction and socket preservation grafts on their patients. They will monitor normal healing after Guided Bone Regeneration application and will be placing implants in the healed extraction sites at the Part II session of the program.

After completing this course and hands-on training, the attendee should be able to do the following:

- Describe the extraction socket techniques.
- Understand the patterns of ridge resorption after tooth extraction.
- Understand the histological events in a healing socket after tooth extraction with and without graft material.
- Know the biological materials that are used for extraction socket preservation.
- Know the extraction socket classification and its role in determining the need for graft material.
- List and describe the potential prosthetic complications that may occur when socket preservation is indicated and not performed.
- Treatment-plan implant cases based on final prosthesis.
- Perform atraumatic extraction, manipulate bone graft and membrane.
- Surgically place simple implant cases.
**MODULE 4:**

**Surgical Implant Placement for Implant Retained Mandibular Overdenture, State of the Art.**

**Course Overview**

The evidence currently available in literature suggests that the restoration of the edentulous mandible with a conventional denture is no longer the most appropriate first-choice prosthodontic treatment. There is now overwhelming evidence that a two-implant overdenture should become the first choice of treatment of the edentulous mandible. Combined Implant – retained and tissue – supported overdenture applied when overdenture prosthesis is supported by both implants and mucosa. It is superior in esthetics with flange support, simple, predictable, affordable, and most importantly, easy to clean.

This course will discuss, step-by-step, different techniques for implant-retained overdentures and the considerations to ensure predictability. Participants will be able to surgically perform alveoloplasty (if needed) and to place 2 implants in the anterior mandibular to retain a complete denture with a locator system.

**Learning Objectives:**

The overall goal of this hands-on program is to provide general dentists and specialists with evidence-based scientific information on implant retained mandibular overdenture. The participants will be performing alveoloplasty (if needed) and will place 2 implants on their patients. They will monitor normal healing after the surgical procedure and will be placing implants in the anterior mandible in this clinical program.

After completing this course and hands-on training, the attendees should be able to do the following:

- Treatment plan cases that will be suitable for implant retained overdentures.
- Learn the guidelines for surgical implant placement protocol to retain mandibular overdenture.
- Learn the locator attachment system technique for implant retained mandibular overdentures.
- Diagnose cases those are contraindicated for mini-implant retained or supported overdentures.
MODULE 5:

Implant site development, clinical application for surgical techniques and Surgical Implant Placement Continuum

Course Overview
Hard and soft tissue deficiency at the edentulous sites is a challenge to clinicians. Several factors can induce loss of bone and soft tissue; such as periodontal destruction, abscess formation, trauma, vertical tooth fracture, traumatic extraction, congenital malformation, resorption of ridge following extraction, and pneumatization of the maxillary sinus.

Regenerative materials are needed to prepare the site for future implant placement, including a variety of grafting materials and barrier membranes. Multiple techniques for site preservation and development are documented well in literature, such as forced eruption utilizing orthodontic appliance, atraumatic extraction, socket preservation, guided bone regeneration (GBR), horizontal/vertical ridge augmentation, block graft, Ti-Mesh, distraction osteogenesis, ridge splitting, sinus elevation, and internal sinus elevation “osteotome technique”.

This program aims to simplify these techniques through a series of lectures, showing a step-by-step clinical procedure for each technique. Clinical demonstration for hard and soft tissue site development for future implant placement will feature a live surgery session.

Program Objectives:
After completing this course and live surgery session, the attendant should be able to do the following:

- Describe the site development techniques.
- Understand the patterns of ridge resorption after tooth extraction.
- Understand the histological events in a healing socket after tooth extraction with and without graft material.
- Know the biological materials that are used for ridge augmentation and preservation.
- Understand the potential prosthetic complications that may occur when ridge preservation is indicated and not performed.
- Be familiar with the regenerative materials and their applications.
- Perform atraumatic extraction, manipulate bone graft and membrane.
- Surgically perform simple soft tissue and bone augmentation procedures.
- Surgically place simple implant cases.