Value Added Courses of KLE VK Institute of Dental Sciences Belagavi



PREFACE

Supplementing the curriculum with value added courses for higher education institutions is to prepare students to meet the global demand as well as inculcate in them the true ethos of health science education to not only be good health care providers but also good human beings.

KLE VK Institute of Dental Sciences offers not only the dental degrees but offers a variety of short term certificate courses. These courses are conducted by professionals and experts that help students stand apart from the rest, by adding further value to their learning resources, aptitude, knowledge and resume.

These value added courses aim to provide additional learner centric, graded, skill-oriented training, with the objective of improvising clinical skills, attitude and professionalism in students.

Objectives:

- To provide students an understanding of the expectations of patients.
- To improve skills in management of students.
- To foster competencies in students to compete at global level.
- To provide an opportunity to develop inter-disciplinary skills.

This booklet is prepared by Principal KLE VK Institute of Dental Sciences Nehru Nagar, Belagavi – 590010 Phone : 0831-2470362 email : principal@kledental-bgm.edu.in

Edition Year: 2019

CONTENTS

S1. No.	Particulars	Page No.
1	Communications Skills	1-9
2	Early Clinical Exposure	8-13
3	Medical Emergencies in Dental Clinic	14-19
4	Tobacco Cessation Awareness Programme	20-23
	Value Added Courses for Interns	24
5	Extra Oral Radiographic Techniques	25
6	Preparation for Entrance Examination	27
7	Smile Designing Principles & Veneer preparation : Hands-on course	28
8	Hematological Interpretations	30
9	Trans-alveolar method of Tooth Extraction and IM/IV Demonstration	32
10	Stainless Steel Crown in Primary Molars of Children	34
11	Molar Endodontics (Root Canal Treatment on Extracted molar tooth using hand instruments)	35
12	General & Clinical Photography	37
13	Minor Surgical Periodontics	39

COMMUNICATION SKILLS

PREAMBLE

Communication is the key to education, understanding and peace.

Communication

Oral communication is the process of expressing information or ideas by word of mouth. This book will help you to find out how you can improve your own oral communication abilities while dealing with patients and relatives. Great communication skills are your ticket to success in the clinical work in urban & rural set and academic. But have you ever been overcome by fear or anxiety prior to speaking in front of patients? Knowing when to choose oral communication and polishing your speaking skills can help you at every stage of your career.

'Communication' comes from Latin *commūnicāre*, meaning "to share" which is the purposeful activity of information exchange between two or more participants in order to convey or receive the intended meanings through a shared system of signs and semiotic rules.

Communication takes place inside and between three main subject categories: human beings, living organisms in general and communication-enabled devices (for example sensor networks and control systems). Communication in living organisms (studied in the field of biosemiotics) often occurs through visual, auditory, or biochemical means. Human communication is unique for its extensive use of language.

Human language can be defined as a system of symbols (sometimes known as lexemes) and the grammars (rules) by which the symbols are manipulated. The word "language" also refers to common properties of languages. Language learning normally occurs most intensively during human childhood. Most of the thousands of human languages use patterns of sound or gesture for symbols which enable communication with others around them. Languages tend to share certain properties, although there are exceptions. There is no defined line between a language and a dialect. The communication is two way process instead of one way.

The "information communication revolutions":

1. Written communication first emerged through the use of pictographs. The pictograms were made in stone, hence written communication was not yet mobile.

1

- 2. The next step occurred when writing began to appear on paper, papyrus, clay, wax, etc. with common alphabets. Communication became mobile.
- 3. The final stage is characterized by the transfer of information through controlled waves of electromagnetic radiation (i.e., radio, microwave, infrared) and other electronic signals.

Communication is thus a process by which meaning is assigned and conveyed in an attempt to create shared understanding. This process, which requires a vast repertoire of skills in interpersonal processing, listening, observing, speaking, questioning, analyzing, gestures, and evaluating enables collaboration and cooperation.

Misunderstandings can be anticipated and solved through formulations, questions and answers, paraphrasing, examples, and stories of strategic talk. 'Good Communication is the bridge between confusion and clarity'. Written communication can be clarified by planning follow-up talks on critical written communication as part of the everyday way of doing business. A few minutes spent talking in the present will save valuable time later by avoiding misunderstandings in advance. A frequent method for this purpose is reiterating what one heard in one's own words and asking the other person if that really was what was meant.

'Communication works for those who work at it'.

(compiled from https://en.wikipedia.org /wiki /Communication)

OBJECTIVES

- 1. To formally impart education on communication skills.
- 2. To enhance the capacity of students in communicating with patients, relatives, colleagues and facilitators.
- 3. To conduct interactive session and workshop to augment the skills acquired.
- 4. To develop effective communication skills required in academics, practice of Dentistry and in general.

DURATION OF COURSE : 72 Hours

Course will contain 3 phases

Phase I will be conducted during I BDS Course : Total 22 hours. (16 days)
Phase II will be conducted in II BDS : Total 18 hours. (16 days)
Phase III will be conducted in III and Final BDS : Total 32 hours – (16 days)

ELIGIBILITY

- 1. Phase I will be for all I BDS Students.
- 2. Phase II will be for all II BDS Students.
- 3. Phase III will be for III and Final BDS students

LIST OF MODULES AND COURSE CONTENT

<u>** Phase I **</u>

Module I : 6 Hours

Communications skills

- Introduction
- Fundamentals of Articulation
- Body Language :
 - i) Types
 - ii) Effects of Body language
 - iii) How to improve body language
- Importance of Grooming

Module II : 8 Hours

Presentation skills & Public Speaking

- Introduction
- Crucial Elements
- Requisites for Effective Presentation :
 - i) Controlling anxiety
 - ii) Audience centered
 - iii) Accomplished objective
 - iv) Create interest in audience (fun for audience and self)
 - v) Conduct within time frame
- Presentation sequence
- Creating Effective Visual Aids
- Presentation Techniques
- Practice

Module III : 8 Hours

Interpersonal skills

Ability to convey your point and listen and value others speak

- What are Interpersonal Skills
- Why do Interpersonal Skills matter
- 10 key Interpersonal Skills
 - i) Self confidence
 ii) Work ethic
 iii) Relationship Management
 iv) Receptiveness to feedback
 v) Body language
 v) Work place etiquette

** Phase II **

Module IV : 10 Hours

Time management

- Planning : Understanding the difference between urgent and important
- Time management skill
 - i) Delegate tasks
 ii) Prioritize work
 iii) Schedule task
 iv) Set up deadlines
 v) Avoid Procrastination
 v) Avoid Procrastination
 vi) Avoid stress
 vii) Avoid multitasking
 viii) Start Early
 ix) Take regular breaks
 x) Learn to say no
- Increase in effectiveness and efficiency

Module V : 8 Hours

- 1. Interactive Session and group activity with Resource Person and participants.
- 2. Oral presentations by the students.
- 3. Assessment of Log Book by Resource Person.

Note :

Phase I will consist of modules I, II and III Phase II will consist of modules IV & V Phase III will consist of modules VI

Assessment Method

- 1. Interactive Sessions will be graded throughout the programme.
- 2. At the end of Phase I the log book of activities will be assessed and signed off by the Resource Person.
- 3. At the end of Phase II the log book of activities will be assessed and signed off by the Resource Person and by the Principal.

About the Resource Person

• Resource person is a well-known trainer on communication and soft skills with deep knowledge and wide experience in areas of business communication, oral presentation and public speaking

COMMUNICATION SKILLS ** Phase III **

Preamble

Communication skill plays an important role in health care. Effective communication helps establish rapport with patient and helps to obtain information, explain the findings of the diseases to patient, explain need for any further investigation. It also helps to discuss various treatment options to patient and the family member / relative and obtain informed consent before examination or any procedures. The effectiveness of treatment depends on post treatment and follow-up instructions. Patient care could be multidisciplinary, it necessary for student to understand and develop sound interpersonal relationship so as to provide holistic management. An effective communication will help in case presentation and scientific deliberation. Hence communication has become a core clinical skill rather than an optional curricular component. Thus including formal training in communication skills is an integral part of the undergraduate dental curriculum. Students can be trained through series of skill that can be taught, learned an retained. In the light of above knowledge an informal program to impart communication skill is planned.

Target Learners – III BDS and Final BDS students

(Module to be conducted during the clinical postings in each department)

Aim : To impart training on communication skills which includes listening, observing, speaking understanding interpersonal process, questioning, analyzing, non-verbal and written communication.

Course objectives – Every under graduate will understand and use communication (verbal and written) effectively.

6

Objectives – By end of the training session every student will be able to

- a. Collect relevant information for diagnosis and effective management of patient
- b. Convey relevant information (before / during and after) pertaining to effective management
- c. Communicate written information / write notes about patient care including clinical observations, lab notes, referral notes for other investigations, prescription etc.
- d. Demonstrate an appropriate non-verbal communication during entire procedure of patient care. (body language and gestures)
- e. Demonstrate effective interpersonal skill during team work with colleagues, paramedics and support staff.

Educational strategies

Module VI (Continued from the previous modules done in I & II BDS)

The III BDS students will have refresher programme at the beginning of the course. The students will be trained for effective communication for the following : -

- 1. Counselling for diet, oral health care and tobacco
- 2. Case history taking
- 3. Consent and assent
- 4. Advising chair side lab investigations
- 5. Advise for radiography
- 6. Instructions during treatment procedures
- 7. Post treatment instructions
- 8. Conveying and handling mishaps

Protocol for Training

 Counselling – for diet, oral health care and tobacco – will be taken by the Department of Public Health Dentistry

- Case history taking will be taken by the Department of Periodontics
- 3. Consent will be taken by the Department of Oral Surgery
- 4. Assent will be taken by the Department of Pedodontics
- 5. Advising chair side lab investigations will be taken by the Department of Oral Pathology and Microbiology
- Advise for radiography will be taken by the Department of Oral Medicine and Radiology
- 7. Instructions during treatment procedures will be taken by the Department of Orthodontics
- 8. Post treatment instructions will be taken by the Department of Prosthodontics
- 9. Conveying and handling mishaps will be taken by the Department of Conservative Dentistry

Students will be instructed about the various communication skills required in each dental department and about the criteria of assessment. Every student will receive feedback on their performance in the clinic.

- 1. History taking relevant to each dental department
- 2. Informed consent for diagnostic and treatment procedures
- 3. Advising investigations referral writing
- 4. Interpreting investigations and advising treatment
- 5. Explain the procedure to the patient / relative (before and during treatment)
- 6. Post treatment instructions
- 7. Counseling for tobacco / stress related diseases, diet, oral hygiene
- 8. Breaking bad news (fracture of instruments, accidental trauma from burs, chemical burns etc)

Assessment - Through checklist, log books and feedbacks

Programme evaluation

- 1. Department-wise assessment
 - a. Immediate outcome for understanding the skill and use effectively
 - b. Mid-term outcome : fair well in assessment conducted
 - c. Long-term outcome : communication skill will be integral part of dental curriculum and all the objectives will be achieved.

Feed back of students on training - Department wise

Feedback by patients – randomly in each department

Necessary revisions in the program as per feed back

References

- Hannah A. Milli Champ CJ, Ayers KM. A communication skills course for undergraduate dental students. J Dental Educ 2004 ; 68(9); 970-7
- Oh J, Sega R, Gordon J, Boal J, Jotkowitz A Retention and use of patient centered interviewing skills after intensive training. Acade Med 2001; 76(6): 647-50

EARLY CLINICAL EXPOSURE

Aim :

As there is tectonic changes in Dental knowledge, skill, technology, and practice and with changes in the clinical environment, patients expectation, need for accountability of stakeholders, there is need for understanding these basis demand. Early effective approach to the learning and the preparation of learners will be of immense benefit.

Objectives:

- To acquire knowledge about common dental diseases
- To assess knowledge pertaining to oral hygiene aids
- To know the status of dental disease in the community
- Orientation to several aspects of dental practice
- Introduction to clinical skills (history taking, oral examination)
- To learn communication skills, patients perspectives and aspects of professionalism
- To understand oral health and disease
- Orientation to community health education

I BDS

Program Details : 32 hours (7 days)

Phase I - Sensitization Lecture

Phase II – Visit to Dental Health Education Camp

Phase III - Visit to Primary Health Centre and Satellite Centers

Phase IV - Visit to Various Specialty Department of KLE VK Institute of Dental Sciences and Interaction with the Staff

Phase I

Sensitization Lecture : 2 Hours (1 day)

- Gross introduction on common oral health and disease.
- Introduction on Survey procedures and information about Primary Health Care Centre and Satellite Clinic.

Phase II

Visit to Village for Screening and Dental Health Education Camp : 8 hours (1 day)

Students will participate and conduct :

- 1. Health Education
- 2. School Oral Health Check Up
- 3. Door To Door Survey.

Phase III

Visit to PHC Center and Satellite Center : 8 hours (1 day)

The students will be divided into groups for the visit to :

- 1. Primary Health Centre at Kiniya
- 2. Satellite centre at KLE Centenary Charitable Hospital and MRC, Yellur, Belagavi

Phase IV : Visit to all speciality Department of KLE VK Institute of Dental Sciences and Interaction with the Staff. – **4 Hours (1 day)**

EARLY CLINICAL EXPOSURE II BDS

Phase I – Sensitization Lecture : 2 hours (1 day)

- 1. Research Cross-sectional studies/Questionnaire studies
 - In-vitro studies
 - In-vivo studies
- 2. Paper/Poster

Presentation - Scientific Convention

Conferences – IDA

3. Publication – Preparation of article for publication in the Journal

Phase II - Visit to Dental and other Laboratories : 5 hours (1 day)

A group of 50 students each in two batches will be taken to :

- 1. Prosthodontics Laboratories
- 2. Oral Pathology and Microbiology Laboratories
- 3. Dr. Prabhakar Kore Basic Science Research Centre, Belagavi (BSRC)
- 4. National Institute of Traditional Medicine, Belagavi (RMRC/NITM)

Phase III : 3 hours (1 day)

In divided batches students will visit to all departments of Dentistry to observe the ongoing treatment procedures and to have more insight during surgical operation (OT) procedures.

Evaluation of students participation :

- 1. Attendance of students for every phase to be recorded
- 2. Recording in log book and preparation of summary report
- 3. Concerned Teacher in-charge to approve every phase
- 4. Final approval and completion certificate with grades by the HOD.

MEDICAL EMERGENCIES IN DENTAL CLINIC

Duration : 15 hours

Aim:

To train Post-graduates students to manage complications and medical emergencies in Dental clinics .

Objectives:

By the end of the course the learner will be able to

- 1. Evaluate and assess the patient by identifying the emergency.
- 2. Perform emergency procedures and maneuvers (CPR).
- 3. Understand the emergency cart and drug kit.
- 4. Administration of appropriate treatment by establishing IV/IM lines.
- 5. Patient follow up.

Course content:

S1. No	Topics
1.	BLS, Foreign body, Chocking Airway Management
2.	Anaphylaxis, Drug Trolley, IV, IM, Subcutaneous, ryle's tube insertion
3.	Trauma & Shock
4.	Suturing & Hand eye co-ordination
5.	Case Scenarios

Modules of the course (15 hours)

Proposed topics to be covered - Department wise

5 Modules -

Module 1 - 3 hours

Dept of OMFS

- Syncope
- Anaphylaxis

Dept of Oral Pathology

- Establishing IV Access
- IM Demonstration

Module 2 - 2 hours

Dept of Pedodontics

- Epilepsy
- Asthma

Module 3 - 3 Hours

Dept of Periodontics

- Bleeding in Dental clinics

Module 4 - 2 Hours

Dept of Endodontics

- Foreign Body Aspiration

Module 5 - 5 Hours

Dept of Prosthodontics

- Suturing in Dentistry

Education Strategies

Instruction methods	Assessment Methods
1. Didactical lectures	
2. Interactive lectures	5. Pre-course evaluative test
3. Case scenarios	6. Post-course evaluative test
4. Power Point presentations	

Program evaluation

- Feedback- students.
- Assessment scores

Mode of conduct of course: IN SKILL LAB, KAHER

- Power point presentations and lectures.
- Case scenarios.
- Perform emergency procedures and maneuvers.

Eligibility: All PG students

Course Duration: 15 hours

- Respective Departments will prepare :
 Power point presentations of the given topics.
- As per discussed in meeting with Dr. Abhijeet Gogte, Principal, Vice Principal and all H.O.Ds, Medicine and Anesthesia staff from JNMC will give demonstrations on the required topics.
- The Co-ordinators will co-ordinate the dates with the skill lab, ppts, pre-test and post-test questionaires and feedbacks.

Course Co-ordinator: Dr. Tejraj P Kale

Department Co-ordinators :

•	Oral Medicine	- Dr Anjana Bagewadi
•	Public Health Dentistry	- Dr Vinuta Hampiholi
•	Prosthodontics	- Dr Swapnil Shankargouda
•	Oral Pathology	- Dr Deepa Mane
•	Pedodontics	- Dr Neeraj Gokhale
•	Maxillofacial Surgery	- Dr Sanjay Rao
•	Periodontics	- Dr Abhishek Zingade
•	Orthodontics	- Dr Rohan Hattarki
•	Conservative	- Dr Sonal Joshi

Course Co-ordinator: Dr. Tejraj P Kale, Dept of Oral & Maxillofacial Surgery

Member Secretary : Dr. Anjana Bagewadi, Dept of Oral Medicine & Radiology

Members: All Department HODs.

Advisory Committee

- Dr. Alka Kale- Principal, KLE VKIDS
- ► Dr. Anjana Bagewadi- Vice Principal, KLE VKIDS
- Dr. Sonal Joshi- Dean, KLE VKIDS
- Dr. Abhijeet Gogte, Incharge Skill lab, KAHER

Resource Persons:

- Co-ordinators of all departments.
- Department of Anaesthesia.
- ► Department of General Medicine.

Expected Outcomes

By the end of this course the learner will be able to

- ► Identify and analyse a medical emergency situation.
- Perform emergency procedures and maneuvers till further help arrives and knowledge of emergency drugs.
- Utilization of Skill lab.
- Acquire skills to successfully handle an emergency situation in a dental setup.

TOBACCO CESSATION AWARENESS PROGRAMME III, IV BDS & Interns

Preamble

The chief commercial crop of tobacco is *Nicotina tabacum*, though more than 70 species of tobacco are known, the more potent variant *N. rustica* is also used around the world. Tobacco contains the highly addictive stimulant alkaloid 'nicotine' apart from other alkaloids and chemicals. Dried tobacco leaves are mainly used for smoking in cigarettes, cigars, as well as pipes and shishas (Hookah). They are also consumed as snuff dipping, chewing tobacco and using it as dentifrices.

Tobacco use is a cause or risk factor for many diseases; especially those affecting heart, liver, lungs and oral cavity. The treatment of these diseases and cancer is huge financial burden on patient's family. In 2008, the World Health Organization named tobacco use as the world's single greatest preventable cause of death. Its use is one of the leading causes of preventable morbidity and mortality in the world.

Tobacco dependence is an addiction that is hard to quit and requires repeated intervention and multiple attempts to quit. Oral cancer is the 4th most common cancer in Indian males and 5th most common in Indian females. Dentist get opportunity to see the patients and create awareness among patients at the earliest. Inclusion of education on tobacco cessation into clinical setup provides the opportunities to the doctor to remind the tobacco users about the ill effects of tobacco and motivating them to quit. Identifying and assessing tobacco user increases clinician intervention and thus prevention. Tobacco cessation is the process of discontinuing tobacco smoking. Nicotine withdrawal often makes the process of quitting difficult.

Objectives :

a. Knowledge

At the end of course the student is excepted to know :

- 1. Basic concepts of types of tobacco
- 2. Use of tobacco in different forms
- 3. Ill effects of tobacco and common oral lesions cause by tobacco use
- 4. Methods of bring about tobacco awareness
- 5. The protocol to be followed for tobacco cessation

b. Skill

At the end of course the student is excepted to make use of the knowledge for :

- 1. Identify tobacco users in the daily practice
- 2. Identify any tobacco associated oral diseases
- 3. Educate patients about the ill effects of tobacco use
- 4. Counsel the patients to quit tobacco habit
- 5. Refer the patients to tobacco counseling cells / centres
- 6. Refer the patient for specific treatment for tobacco associated lesions

Duration of the course : 26 Hours (6 days)

Course will contain : 3 phases

Phase I : III BDS - 8 Hours (2 days)

- Phase II : IV BDS 5 Hours (1 day)
- Phase III : Interns 13 Hours (3 days)

Phase	Program	Duration
	a. Lecture on Tobacco : types & uses	30 minutes
	b. Lecture on ill effects of Tobacco	30 minutes
	c. Epidemiology of cancer	1 hour
	d. Lecture on Tobacco cessation Protocol	1 hour
	e. Demonstration of Patient educational tools	1 hour
Phase I	f. Patient registration for counseling and	30 minutes
for	consent form	1 hour : 30
III BDS	g. Demonstration on patient counseling	minutes
	h. Observation of actual patient being advised	2 hours
	and counseled by tobacco counselor	
	(Demonstration and Patient counseling at the	(2 Days)
	Tobacco cessation cell in the Dept. of Oral	
	Medicine and Radiology)	
	a. Students introduced to patients with	
	tobacco habits.	
Phase II	b. Registration of patient & filling of consent form	5 hours
for	c. Perform counseling cessation under staff	(1 Day)
IV BDS	supervision.	(I Day)
	d. Feedback is given to the students about	
	their counseling the patients	
	a. One day workshop is conducted to improve	8 hours
Phase	the student's knowledge and understanding	(2 days)
TIT	of Tobacco cessation strategies and boost	
for	their skills and ability in providing effective	
Interne	tobacco cessation interventions.	
11101113	b. Intern should counsel 5 patients by the end	
	of internship	5 hours

Course Content

Phase	Program	Duration
	c. Reinforcement of tobacco and its associated	(1 Day)
	diseases : Identification, confirmation of	Done during the
	diagnosis and treatment plan.	regular teaching
		learning process
		in all
		departments.

Resources :

- Faculty : Trained faculty of Tobacco Cessation Cell.
 All other faculty members of depts. of Oral Medicine, Oral Pathology, Oral Surgery and Public Health Dentistry.
- 2. Reading material and educational pamphlets
- 3. Patients

Methods of Instruction / Training

Lectures, demonstration, videos, case scenario.

VALUE ADDED COURSES FOR INTERNS

Preamble

We believe that Dental education goes beyond addressing the capacitydemand problem and may serve as an ideal starting point for building a new vision for the future of Dental education. In the first year of dental programme if the students are engaged in basic dental care team and involve in meaningful roles of providing care appropriate to their stage of training will motivate them to be more pro-active in subsequent years of training.

We addressed these courses as "value-added courses for interns", where powerful pragmatic learning experiences will add value and capacity to the dental care delivery system. This can be attained by training and involving dental students in targeted patient care duties. Students are generally motivated and look forward to engage in direct patient care and hence take on the responsibilities with enthusiasm.

Leadership is required to be persuasive to achieve the vision, to build relationships with the clinical training methods. These **course** can provide basis of leadership skills that helps in decision making, effective planning, work independently and as a team for best clinical outcome. This will require to set in early clinical training, including patient communication and physical exam courses. Value-added educational courses have the potential to develop interest, capacity building and actively engage in patient care chores that contribute to the Dental health of their patient populations.

DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY

Topic : Extra Oral Radiographic Techniques

Duration- 20 hours

Aim :

To develop proficiency in identifying and interpretation of various extra oral radiographic views, (normal anatomical landmarks with variations and clinical applications of each radiographic projection).

Course Objectives :

By the end of this course all interns should be able

- 1. Identify the radiographic view.
- 2. Identify the normal anatomical landmarks and pathology.
- 3. Prescribe right radiograph.
- 4. Provide radiographic differential diagnosis

Course content

Extra oral radiographic views

- Paranasal sinus
 PA Projection
 Standard Occipitomental view
 Modified Occipitomental view
 Water's View (PNS)
- 2. Base of the skull Submentovertex
- 3. Mandible

PA mandible

Rotated PA mandible

Lateral oblique

-Body

- Ramus

- 4. Temperomandibular joint
 - Transcranial

Transpharyngeal

Transorbital

- 5. Reverse Towne
- 6. Skull

Lateral cephalogram

7. Orthopantomograph

Teaching methods :

The topics will be covered through videos, demonstrations, handouts, power-point presentations of normal anatomical landmarks and pathologies.

Assessment :

1. After session - Assessment sheet / checklist

References:

- Oral Radiology- Principles and Interpretation Stuart C White and Michael J Pharoah 5th and 6th edition
- Essentials of Dental Radiography and radiology, 4th edition, Author-Eric Whaites

DEPARTMENT OF PUBLIC HEALTH DENTISTRY

Topic : Preparation for Entrance Examination

Duration – 18 hours during clinical rotations

Aim : To sensitize students to the NEET preparation of Public Health Dentistry.

Objective :

By the end of the course at least 90% of the interns will be able to

- 1. Understand the importance Public Health Dentistry questions in NEET.
- 2. Improve their competency level in attempting questions of Public Health Dentistry
- 3. Recall the correct answers of the MCQ's.

Course Content :

- 1. Indices
- 2. Preventive dentistry
- 3. General epidemiology
- 4. Survey and planning
- 5. Epidemiology of dental diseases
- 6. Biostatics
- 7. Flourides
- 8. Environment and health
- 9. Health education

Approach:

Lectures and Demonstrations

Assessment and Monitoring : MCQ Test

Reference Books:

- 1. Dental Pulse
- 2. Gouri Shankar
- 3. Manish Prabakar
- 4. Vivek Jain
- 5. Satish Chandra

DEPARTMENT OF PROSTHODONTICS CROWN & BRIDGE

Topic : Smile Designing Principles & Veneer preparation : Hands-on course

Duration : 16 hours

Aim : To provide knowledge to students for Practical orientation of case selection in Veneer preparation for management and esthetic treatment of patients to improve esthetic smile.

Objectives:

By the end of the course the Interns should be able to demonstrate competence in the following skills

- 1. Learn diagnosis and evaluation of patient for Veneers
- 2. Understand and use of Diagnostic tools
- 3. Acquire knowledge in model preparation by incorporating smile design principles
- 4. Learn the detail techniques of Veneer preparation on study models

Approach :

- Module 1 Introduction to case selection, use of Diagnostic tools, Crown and Bridge teeth preparation (4 hours)
- Module 2 Soft Tissue management, Impression making, Temporization. (4 hours)
- Module 3 Wax pattern fabrication, Temporization cementation procedures (4 hours)
- Lectures and demonstrations (4 hours)

Course Content :

- 1. Case selection
- 2. Use of Diagnostic tools
- 3. Veneer preparation on Study models
- 4. Wax up
- 5. Soft Tissue management
- 6. Impression making
- 7. Temporization
- 8. Cementation procedures.

Assessment :

By conducting Objective Structured Clinical Examination (OSCE)

Reference Books :

- Esthetic in dentistry by R. E. Goldstein, 3rd Edition Vol 1 & 2 willey Publisher
- Science and art of Porcelain laminate Veneers by Gulop Gurel Quintessence publishing 1st Edition.
- Change your smile by Ronald E. Goldstein, 4th Edition Quintessence publishers

DEPARTMENT OF ORAL & MAXILLOFACIAL PATHOLOGY & ORAL MICROBIOLOGY

Topic : Hematological Interpretations

Course duration: 15 hrs (One hour every day for 15 days)

Aim: To make interns training programme in clinical pathology effective so as to develop independent capabilities in a student to learn and apply the knowledge of hematology through interpretation of test results in identifying blood related problems and their diagnosis.

Objectives:

- 1. To train a student so as to ensure higher competency in clinical pathology dealing with blood (blood related diseases, their causes, processes and effects).
- 2. He/she is expected to perform collection of blood from different sites depending on age of patient and procedures to be done.
- 3. He/she is expected to perform routine haematological evaluation such as complete blood count (haemoglobin estimation, bleeding time, clotting time, Random blood sugar, total RBC count, total WBC count and Differential WBC count) of collected blood samples.
- 4. He/she is expected to have an understanding of collection and interpretation of data. He/she is expected to have an understanding of normal ranges and altered values, diseases in which they are altered and processes involved.
- 5. He/she is expected to deal with correct professional handling, examination, interpretation.

Skills:

1. To develop confidence in graduate students to handle and to manage laboratory and research responsibilities in future.

Course Content:

- I. Introduction and scope of hematology
- II. Physiology of Blood
 - a. Blood cells
 - i. RBC
 - ii. WBC
 - iii. Platelets
 - b. Plasma
- III. HematologyTests: complete blood count tests
- IV. Interpretation of complete blood count tests
 - a. Normal values
 - b. Altered values
 - i. Conditions in which values are increased
 - ii. Conditions in which values are decreased
- V. Blood disorders and disease processes

Approach: Topics to be covered as didactic lectures, demonstrations and seminars.

Assessment and monitoring:

- 1. Log books.
- 2. Objective structures clinical examination (on patients) with checklist.
- 3. Objective structures practical examination (using previously stained slides of blood smears and questions framed relating to the interpretation).

Reference Books:

- 1. Textbook of Haematology by Tejindar Singh
- 2. Bethesda Handbook of Clinical Hematology 3rd Edition
- 3. Hematology for Students and Practitioners by Ramnik Sood
- 4. Practicals and Quick Review by Ganga S.Pilli
- 5. For Applied aspects : Textbook of Oral Pathology by Shafer
- 6. Text book of human physiology by Chaterjee

DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

Topic : Trans-alveolar method of Tooth Extraction and IM/IV

Demonstration

I. Trans-alveolar method of tooth extraction

Duration : 15 hours

Objectives:

By the end of the course all the interns will be able to

- 1. Understand the indications for transalveolar extraction.
- 2. Identify instruments required for trans-alveolar extraction.
- 3. Understand the principles of incision and flap design, methods of bone cutting, tooth removal, suturing.
- 4. Perform transalveolar extraction (open extraction) on patients.

Course Content for transalveolar extraction : -

- 1. Introduction of trans-alveolar extraction 1 hour
- 2. Indications of trans-alveolar extraction 1 hour
- 3. Principles of incision and flap design 1 hour
- 4. Methods of bone removal, tooth division, socket toilet 2 hours
- Video demonstration of bone removal, tooth division, socket toilet 1 hour
- 6. Suturing and aftercare 1 hour

Approach :

- 1. Lectures
- 2. Video demonstration
- 3. Live demonstration of transalveolar extraction

Assessment and monitoring

1. Assessment while performing on patients using checklist

II. IM/ IV injection Techniques - 8 hours

Aim : To train the students perform IM/ IV injection

Objective:- At end of the course, students should be able to explain how to give IM/ IV injection and individually perform IM/IV injections

Duration: - 8 hours

- 1. Power Point Presentation on anatomical landmarks for IV 1 hour
- 2. Power Point Presentation on anatomical landmarks for IM 1 hour
- 3. Video demonstration of IV / IM 2 hour
- 4. Demonstration on the patient for IM 1 hour
- 5. Demonstration on the patient for IV 1 hour
- 6. Students to perform on patient 2 hours

Course contents:-

- 1. Introduction and Brief anatomy at the area of injection.
- 2. Technique of IM/IV injection theoretic knowledge and demonstration

Approach :

- 1. Power point presentation of IM/IV techniques
- 2. Video demonstration
- 3. Live demonstration of IM/IV techniques

Assessment of students – To assess how much each student has understood about the course by observation and checklist.

Reference Books :

- 1. Clinical Surgery Michael H.
- 2. Fundamental of Nursing Potter and Perry and Jeoffrey Thomson

DEPARTMENT OF PEDODONTICS AND PREVENTIVE DENTISTRY

Topic : Stainless Steel Crown in Primary Molars of Children Duration : 16 hours

Aims :

The interns should acquire adequate knowledge and necessary skills towards placement of a Stainless Steel Crown also understand the basic concepts in occlusion.

Objectives :

The interns should acquire the following during the period of training:

1. Knowledge about Anatomy of primary and permanent teeth

2. Attributes, Indications and contraindications for stainless steel crowns.

3. Demonstrate Crown Preparation methods for Stainless steel crowns.

Skills :

1. Able to differentiate indications and contraindications for placement of Stainless Steel Crown.

2. Acquire skills to prepare a tooth for receiving a Stainless Steel Crown.

3. Select an appropriate size crown.

4. Skills to maintain occlusal relation and to identify any occlusal disharmony and take measures to correct it if any need arises.

Course Content :

Week 1:

1. Introduction to anatomy of primary and permanent teeth in brief and different crowns in Pediatric Dentistry

2. Introduction to stainless steel crowns.

- 3. Indications and contraindications for stainless steel crowns.
- 4. Crown Preparation for Stainless steel crowns.

Week 2:

1. Methods of Placement of Stainless steel crowns.

2. Demonstration of Placement of Stainless steel crown on typhodont/ extracted teeth by the faculty.

3. Placement of Stainless steel crown on typhodont/ extracted teeth by the Interns.

Week 3:

1. Live Demonstration on placement of Stainless steel crown on patient by faculty.

2. Placement of Stainless steel crown on extracted tooth by interns.

Approach :

- 1. Lectures and demonstrations
- 2. Hands-on training with dummy models.

Assessment :

Review of Performance by the Interns

References Books :

- Mathewson R. J. Fundamentals of Pediatric Dentistry, 3rd Edition. Boston : Quintessenec Books, 1995
- Kennedy DB, Roberts JF, Curzon ME, J Kennedy's Pediatric Dentistry, 4th edition, Oxford Wright, 1997
- Tandon S. Textbook of Pedodontics. 2nd Eition. Hydrabad : Paras Publications 2009

DEPARTMENT OF CONSERVATIVE DENTISTRY & ENDODONTICS

Topic : Molar Endodontics (Root Canal Treatment on Extracted molar tooth using hand instruments)

Duration of Course : 15 Hours Maximum

Aim : To provide basic knowledge about molar root canal therapy to aid in clinical practice

Objectives:

By the end of this course all the interns should be able

- 1. To know the root canal anatomy of molar teeth.
- 2. To identify and use endodontic hand instruments and material required for the procedure.
- 3. Perform all the steps involved in Molar Endodontics
- 4. Perform RCT on extracted molar using endodontic hand instruments.

Course Content :

- 1. Basic knowledge on anatomy of molar and root canal system 1 hour
- 2. Lecture and demonstration on Access Opening 2 hours
- 3. Methods of measurement of Working Length 2 hours
- 4. Demonstration of Cleaning and Shaping 2 hours
- 5. Discussion on Irrigation Protocol 2 hours
- 6. Interaction on Master Cone 2 hours
- 7. Methods of Obturation 2 hours
- 8. Techniques of Core Buildup 2 hours

Approach : Discussion and Demonstrations

Assessment and Monitoring :

- 1. Observation using check list
- 2. The Faculty on intern duty will be monitoring the work done by interns.

Reference Books :

- Grossman's Endodontics Practice 12th Edition B. Suresh Chandra V. Gopi C. Krishna
- 2. Ingle's Endodontics 6th Edition Ingle, Bakland, Baumgartner.

DEPARTMENT OF ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

Topic : General & Clinical Photography

Duration : 15 hours

Aim:-

1. To train to students in clinical dental Photography

Objectives :-

By the end of the course at least 80% of the Interns will be able to

- 1. Recall Theoretical, practical, esthetic aspects of photography
- 2. Recall concepts in Medical and Dental photography
- 3. Demonstrate proficiency in Dental photography

Course Content :-

1. Applications of Photography for

- i. Documentation and record
- ii. Progress of the case
- iii. Education, Teaching, Presentation
- iv. Publication, Communication, Teledentistry
- v. Marketing

Approach :

Lectures and demonstrations

- 1. Specific lenses
- 2. Standardized views
 - a. Extra-oral
 - b. Intra-oral
 - c. Single tooth
 - d. Pathology

Assessment

3 rounds of Practical assessment

- 1. Extra oral front photograph
- 2. Extra oral lateral photograph
- 3. Extra oral $3/4^{th}$ photograph
- 4. Intraoral front photograph
- 5. Intraoral right lateral photograph
- 6. Intraoral left lateral photograph
- 7. Intraoral upper occlusal photograph
- 8. Intraoral lower occlusal photograph

Reference Books :

1. Clinical photography in Dentistry – A new perspective – Peter Sheridan

DEPARTMENT OF PERIODONTICS

Topic : Minor Surgical Periodontics

Duration : 41 hours

Objectives :-

At the end of the training the Intern should be able to:

Recall, understand and perform procedure of Gingivectomy, Gingivoplasty, Frenectomy & Frenotomy

Course Content :

- 1. Nonsurgical
- 2. Root Planning
- 3. Treatment
- 4. Local Drug Delivery
- 5. Subgingival irrigation
- 6. Treatment of dentinal
- 7. Hypersensitivity
- 8. Use of Electrocautery Frenotomy
- 9. Frenectomy
- 10. Gingival depigmentation
- 11. Hemostasis
- 12. Use of Laser Frenotomy
- 13. Frenectomy
- 14. Gingival depigmentation

Approach : Lectures and demonstrations

Assessment : Observed assessment

Reference Books :

- 1. Carranza's Clinical Periodontology 13th edition
- Clinical Periodontology and Implant Dentistry volume 1 and volume 2

 6th edition
- 3. Decision making in Periodontology 3rd edition
- 4. Periodontal Medicine 2000

