SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

OSUDU, AGARAM VILLAGE, KUDAPAKKAM POST,PUDUCHERRY-605502.

Date: 20.6.2021

From
DR.BALAJI SUBRAMANIYAN.R,
PROFESSOR AND HEAD,
DEPARTMENT OF DENTISTRY,
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH,
CHENNAI.

To
THE DEAN,
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH,
CHENNAI.

Sub: Permission to conduct value-added course: smile design

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled: **SMILE DESIGN** on 3.7. 21. We solicit your kind permission for the same.

Kind Regards

DR.BALAJI SUBRAMANIYAN.R,

FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean: DR. JAYALAKSHMI

The HOD: DR.BALAJI SUBRAMANIYAN.R,

The Expert: DR.BALAJI SUBRAMANIYAN.R,

The committee has discussed about the course and is approved.

Dean	Subject Expert	HOD
(Sign &Seal)	(Sign &Seal)	(Sign &Seal)

DEAN
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
OSUDU, AGARAM VILLAGE,
KOODAPAKKAM POST,
PUDUCHERRY - 605 502

DR.R. BALAJI SUBRAMANIYAN
Associate Professor
Department of Dentistry
Sri Lakshmi Narayana
Institute of Medical Sciences
Osudu, Agaram, Puducherry.

DR.R. BALAJI SUBRAMANIYAN
Associate Professor
Department of Dentistry
Sri Lakshmi Narayana
Institute of Medical Sciences
Osudu, Agaram, Puducherry.

OFFICE OF THE DEAN

Sri Lakshmi Narayana Institute of Medical Sciences

OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST,
PUDUCHERRY - 605 502.

[Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME (P -II) dt. 11/07/2011]
[Affliated to Bharath University, Chennai - TN]

Circular

25.6.21

Sub: Organising Value-added Course: SMILE DESIGN reg

With reference to the above mentioned subject, it is to bring to your notice that SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES, **Bharath Institute of Higher Education and Research**, is organizing **"smile design on 3.7.21"**. The course content and registration form is enclosed below."

The application must reach the institution along with all the necessary documents as mentioned. The hard copy of the application should be sent to the institution by registered/ speed post only so as to reach on or before 3.7.21. Applications received after the mentioned date shall not be entertained under any circumstances.

Dr.G.JAYALAKSHMI, B.Sc., M.B.B.S., D.C.D., M.D.,
DEAN
Sri Lakshmi Narayana Institute of Medical Sciences
Osudu, Agaram, Kudapakkam Post,
Villianur Commune, Puducherry - 605502.

DEAN

Encl: Copy of Course content and Registration form.

COURSE PROPOSAL

Course Title: SMILE DESIGN

Course Objective: To enlighten students about significance of smile

Course Outcome: In depth knowledge regarding smile

Course Audience: MBBS STUDENTS

Course Coordinator: Dr. Jayalakshmi

Course Faculties with Qualification and Designation:

1. DR. DR.BALAJI SUBRAMANIYAN.R, M.D.S & ASSOCIATE PROFESSOR

Course Curriculum/Topics with schedule (Min of 30 hours)

SlNo	Date	Topic	Time	Hours
1.	3.7.21	Smile Line	4PM-7PM	3 hrs
2.	12.7.21	Gummy smile	4pm-7 pm	3hrs
3.	23.7.21	Facial/Profile angle	5pm-8pm	3 hrs
4.	30.7.21	Long face syndrome	4pm-7pm	3hrs
5.	8.8.21	Maxillary excess	5pm-8pm	3 hrs
6.	17.8.21	Mandibular excess	5pm-8pm	3 hrs
7.	28.8.21	Facial asymmetry	4pm-7pm	3 hrs
8.	7.9.21	Retrognathic mandible	5pm-8pm	3 hrs
9.	13.9.21	Rhinoplasty	5pm-8pm	3 hrs
10.	27.9.21	Bimaxillary protrution	4pm-7pm	3 hrs
			Total Hours	30

REFERENCE BOOKS: (Minimum 2)

1.JONATHANAN B LEVINE .ESTHETHETIC DENTISTRY

2. SMILE DESIGN IN DENTISTTRY NEERAJKUMAR.

SMILE DESIGN

ABSTRACT

The importance of an attractive smile in contemporary culture for better or worse cannot be overstated, and has been extensively studied. This social imperative for good looks and the pervasive marketing of dental products and procedures to consumers have combined to create an unprecedented demand for appearance-related dental treatment. Concurrent with this phenomenon is the inexorable progression of technology and the resultant array of diagnostic and treatment advances presently available to practitioners.

Collectively, these factors have positively impacted dental practice busyness as more individuals seek elective treatments, and patients are benefiting from improved materials techniques. It's a good time to be a patient and to be a dentist. Despite the advances, however, many fundamental principles of clinical dental practice remain unchanged. Specifically, prudent case selection, thorough diagnosis, and meticulous planning and execution of treatment all with strict adherence to biologic and ethical principles continue to define the standard of care. These principles must be applied to elective improvement of dental esthetics with the same diligence as that which traditionally guides the prevention and management of oral disease.

The treatment provides approaches to patient assessment, diagnosis, and esthetic treatment delivery employing evidence-based methods and current technologies. Management of the periodontal-restorative interface. The crown lengthening in the esthetic zone, reviewing contemporary treatment modalities, and their indication.

SMILE DESIGN:

Definition:

Smile design refers to the many scientific and artistic principles that considered collectively can create a beautiful smile. These principles are established through data collected from patients, diagnostic models, dental research, scientific measurements, and basic artistic concepts of beauty.

An organized and systematic approach is required to evaluate, diagnose and resolve esthetic problems predictably. It is of prime importance that the final result is not dependent only on the looks alone. Our ultimate goal as clinicians is to achieve pleasing composition in the smile by creating an arrangement of various esthetic elements.

History:

Smile, a person's ability to express a range of emotions with the structure and movement of the teeth and lips, can often determine how well a person can function in society. Of course, the importance given to a beautiful smile is not new. The search for beauty can be traced to the earliest civilizations; both the Phoenicians (app 800 BC) and Etruscians (app 900 BC) carefully carved animal tusks to simulate the shape, form and hue of natural teeth. It was not until the 18th century that dentistry was recognized as a separate discipline and its various branches were established. Pierre Fauchard (1678–1761) of France, the leader of the movement, together with several colleagues modernized and promoted dentistry and also advocated esthetic practices.

Goal:

The goal of an esthetic makeover is to develop a peaceful and stable masticatory system, where the teeth, tissues, muscles, skeletal structures and joints all function in harmony (Peter Dawson). It is very important that when planning treatment for esthetics cases, smile design cannot be isolated from a comprehensive approach to patient care. Achieving a successful, healthy and functional result requires an understanding of the interrelationship among all the supporting oral structures, including the muscles, bones, joints, gingival tissues and occlusion.

Components:

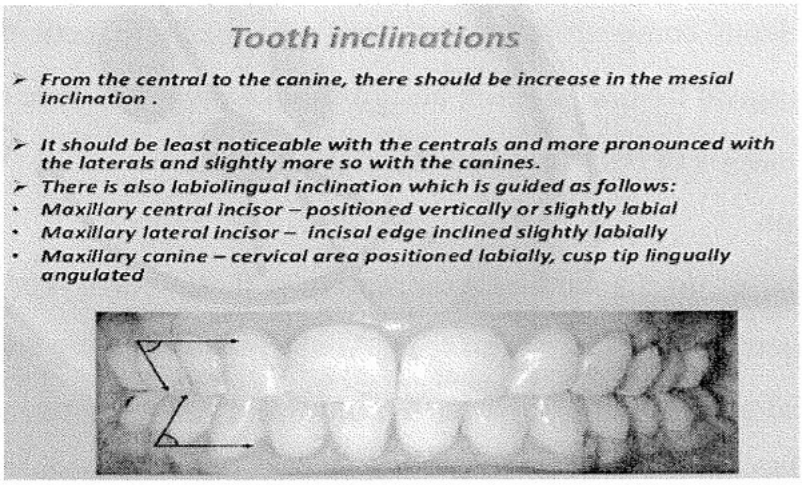
Harmonizing an esthetics smile requires a perfect integration of facial composition and dental composition. The facial composition includes the hard and soft tissues

of the face. The dental composition relates more specifically to teeth and their relationship to gingival tissues. A smile design should always include the evaluation and analysis of both facial and dental composition.

Facial composition

Facial beauty is based on standard esthetic principles that involve proper alignment, symmetry and proportion of face. Analyzing, evaluating and treatment planning for facial esthetics often involve a multidisciplinary approach which could include orthodontics, orthognathic surgery, periodontal therapy, cosmetic dentistry and plastic surgery. Thus, esthetic approach to patient care produces the best dental and facial beauty.

There are two facial features which do play a major role in the smile design: the interpupillary line and lips. The interpupillary line should be perpendicular to the midline of the face and parallel to the occlusal plane. Lips are important since they create the boundaries of smile design. If we come across major discrepancies in the above-mentioned two factors, then we have to seriously consider the correction of the facial composition, before we venture into the correction of the dental composition.



In classical terms, the horizontal and vertical dimensions for an ideal face are as follows:

Horizontal:

The width of the face should be the width of five "eyes".

The distance between the eyebrow and chin should be equal to the width of the face

Vertical:

The facial height is divided into three equal parts from the fore head to the eyebrow line, from the eyebrow line to the base of the nose and from the base of the nose to the base of the chin.

The full face is divided into two parts, eyes being the midline.

The lower part of the face from the base of the nose to the chin is divided into two parts, the upper lip forms one-third of it and the lower lip and the chin two-thirds of it

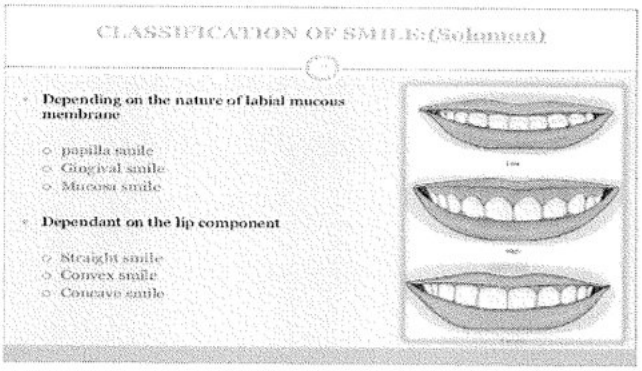
The basic shape of the face when viewed from the frontal aspect can be one of the following:

Square

Tapering

Square tapering

Ovoid



The lateral profile of an individual can be any one of the following:

Straight

Convex

Concave

These factors play a role in determining the tooth size, shape and the lateral profile; in short, the tooth morphology is dependent on the facial morphology.

Vital elements of smile designing (dental composition)
The vital elements of smile designing include the following:

Tooth components

Dental midline

Incisal lengths

Tooth dimensions

Zenith points

Axial inclinations

Interdental contact area (ICA) and point (ICP)

Incisal embrasure

Sex, personality and age

Symmetry and balance

Soft tissue components

Gingival health

Gingival levels and harmony

Interdental embrasure

Smile line

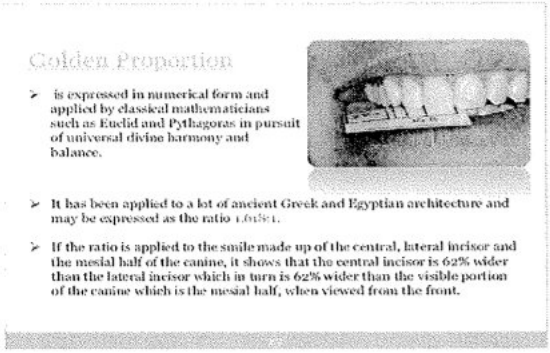
The role of each of the above-mentioned factors in smile designing is given below.

Tooth components of smile designing

Dental midline The midline refers to the vertical contact interface between two maxillary centrals. It should be perpendicular to the incisal plane and parallel to the midline of the face. Minor discrepancies between facial and dental midlines are acceptable and, in many instances, not noticeable.

However, a canted midline would be more obvious, and therefore, less acceptable. The maximum allowed discrepancy can be 2 mm and sometimes greater than 2 mm discrepancy is esthetically acceptable so long as the dental midline is perpendicular to the interpupillary line. Various anatomical landmarks such as midline of the nose, forehead, chin, philtrum, interpupillary plane can be used as guides to the midline assessment.

The philtrum of the lip is one of the most accurate of these anatomical guide posts. It is always in the center of the face except in surgical, accident or cleft cases. The center of the philtrum is the center of the cupids bow and it should match the papilla between the centrals. If these two structures match and the midline is incorrect, then the problem is usually incisal inclination. If the papilla and philturm do not match, then the problem is a true midline deviation. A midline that does not bisect the papilla is more noticeable than the one that does not bisect the philturm.



To evaluate the midline, one must always consider location and alignment. Midline should be parallel to the long axis of the face: the line angle that forms the contact between the centrals should be parallel to the long axis of the face; perpendicular to the incisal plane: the line angle that forms the contact between the centrals should be perpendicular to the incisal plane and over the papilla: the midline should drop straight down from the papilla.

A face bow transfer or even a reference stick aligned parallel to the interpupillary plane provides useful information in laboratory communication regarding midline inclination and the possible presence of a canted incisal plane.

Maxillary and mandibular midlines do not coincide in 75% of cases. Therefore, it is not advisable to use the mandibular midline as a reference point for establishing the maxillary midline. Mismatch between maxillary and mandibular midline does not affect esthetics since mandibular teeth are not usually visible while smiling. Incisal lengths (incisal edge positions) Maxillary incisal edge position is the most important determinant in smile creation because once set, it serves as a reference point to decide the proper tooth proportion and gingival levels. The parameters used to help establish the maxillary incisal edge position are:
degree of tooth display, phonetics and patient input

Degree of tooth display: When the mouth is relaxed and slightly open, 3.5 mm of the incisal third of the maxillary central incisor should be visible in a young individual. As age increases, the decline in the muscle tonus results in less tooth display.
Phonetics: Phonetics is a major determinant of the tooth length. In order to determine proper lip, tongue and incisal support and tooth position, it is necessary that the patient sits either erect or stands during the phonetic exercises.

The various phonetics used are as follows:
M sound: After pronunciation, the lips return to their normal rest position, allowing evaluation of the amount of the tooth display in rest position.
E sound: The maxillary incisal edge position should be positioned halfway between the upper and lower lip during the "E" sound.

F and V sounds: Fricative sounds are produced by the interaction of the maxillary incisal edge with the inner edge of the lower lips' vermilion border. Thus, fricative

sounds help to determine the labiolingual position and length of the maxillary teeth.

S sound: During pronunciation, the mandibular central incisors are positioned 1 mm behind and 1 mm below the maxillary incisal edge.

Patient input: Intraoral cosmetic preview and provisional restorations help to confirm proper placement of the final incisal edge position. The patient desires must be met as best as possible, provided they do not interfere with the parameters previously discussed.

Correct incisal edge position is crucial because it is related to the pitch of the anterior teeth, labial contours, lip support, anterior guidance, lingual contours and tooth display. The pitch of each anterior tooth is determined by the combination of correct lip support and the lingual labial position of the incisal edge. This location influences anterior guidance and the labial and lingual contours. In short, all these factors play a dominant role in both esthetics and function.

CONCLUSION

It is vivid from the above discussion that the smile we create should be esthetically appealing and functionally sound too. It is our duty to carefully diagnose, analyze and deliver the best to our patients, taking into account all of the discussed factors. The smile designing done by us has to be as conservative as possible unlike the past. Our aim has to be less reduction of tooth structure and greater esthetics and durability. This simply means that cosmetic dentistry has to be a multispecialty branch, wherein all treatments like orthodontics, periodontics, surgical procedures have to be performed whenever deemed necessary.

Annexure 2

Bharath Institute of Higher Education and Research

SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

Participant list of Value added course: **SMILE DESIGN on 3.7.2021**

Sl.No	Reg.No	Name of the candidate
1	U13MB297	VINOTHINI. S
2	U13MB296	VINOTHINI.M
3	U13MB264	VINOTHKUMAR.M
4	U13MB295	VINOTHKUMAR.M
5	U13MB298	VISHNU PRASATH. S.
6	U13MB299	VISHVA BRUNDHA.R
7	U13MB300	YENDETI AMRUTHA
8	U14MB331	SURYA PRABHA. B

Bharath Institute of Higher Education and Research

SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES

Participant list of Value added course: **SMILE DESIGN**

Sl.No	Reg.No	Name of the candidate	Signature
1	U13MB297	VINOTHINI. S	
2	U13MB296	VINOTHINI.M	
3	U13MB264	VINOTHKUMAR.M	
4	U13MB295	VINOTHKUMAR.M	
5	U13MB298	VISHNU PRASATH. S.	
6	U13MB299	VISHVA BRUNDHA.R	
7	U13MB300	YENDETI AMRUTHA	
8	U14MB331	SURYA PRABHA. B	

SRI LAKSHMI NARAYANA INSTITUE OF HIGHER EDUCATON AND RESEARCH

Smile design

QUESTIONS

Course Code: DI-3

I. ANSWER ALL THE QUESTIONS

1. What are common face profiles?

2. Definition and etiology for facial asymmetries?

3. Long face syndrome?

4. Classification of asymmetries?

5. Adenoid faces?

NAME: VINOTHKUMA
ROLL NO: U13NB264

28/50

Smile Design

Smile Designing Definition

~~The~~ Is a process whereby the complete oral hard and soft tissues are studied and evaluated any certain changes are brought about which will have a positive influence on the overall esthetics of the face. These changes are governed by the principles of esthetic dentistry

Classification of Smile:

Solomon.

- Depending on the nature of labial mucosa membrane.
  - papilla Smile.
  - Gingival Smile
  - Mucosa Smile:
- Depend on the lip component
  - Straight Smile
  - Convex Smile
  - Concave Smile

profile analysis:

- Straight orthognathic - Normal profile.
- Any deviation from this should be noted and considered in treatment planning

- Examination of the profile could be in the antero-posterior plane or in the Vertical plane.

Facial Component.

- Hard tissues
- Soft tissues.

Dental Component.

- Teeth
- Gingiva.

Teeth components

a. Dental midline.
b. Incisal lengths
c. Tooth dimensions
d. Zenith point
e. Axial Inclination.
f. Interdental Contact
g. Embrasures
h. SPA
i. Symmetry and balance.

Soft tissue components

- Gingival tooth
- Gingival tissue harmony
- Interdental embrasure
- Smile line

Sri Lakshmi Narayana Institute of Medical Sciences

Affiliated to Bharath Institute of Higher Education & Research

(Deemed to be University under section 3 of the UGC Act 1956)

CERTIFICATE OF MERIT

This is to certify that VISHNU PRASATH has actively participated in the Value Added Course on *Smile design* held during JULY 2021 – SEP 2021 Organized by Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry- 605 502, India.

Dr. BALAJI
RESOURCE PERSON

Dr. Jayalakshmi
COORDINATOR

Student Feedback Form

Course Name: SMILE DESIGN

Subject Code: DI - 7

Name of Student: VINOTHINI . S Roll No.: U13MB297

We are constantly looking to improve our classes and deliver the best training to you. Your evaluations, comments and suggestions will help us to improve our performance

Sl. NO	Particulars	1	2	3	4	5
1	Objective of the course is clear		✓			
2	Course contents met with your expectations		✓			
3	Lecturer sequence was well planned			✓		
4	Lectures were clear and easy to understand			✓		
5	Teaching aids were effective		✓			
6	Instructors encourage interaction and were helpful			✓		
7	The level of the course			✓		
8	Overall rating of the course	1	2	✓3	4	5

** Rating: 5 – Outstanding; 4 - Excellent; 3 – Good; 2– Satisfactory; 1 - Not-Satisfactory*

Suggestions if any:

Signature

Date: 27.9.21

COURSE COMPLETION

Date27.9.2021

From
DR. BALAJI SUBRAMANIYAN
DEPARTMENT OF DENTISTRY,
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH,
CHENNAI.

Through Proper Channel

To
THE DEAN,
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH,
CHENNAI.

Sub: Completion of value-added course: smile design

Dear Sir,

With reference to the subject mentioned above, the department has conducted the value-added course titled: **SMILE DESIGN** on 27.9.2021. We solicit your kind action to send certificates for the participants, that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards

DR.BALAJI SUBRAMANIYAN.R

Dr. R. BALAJI SUBRAMANIYAN
Associate Professor
Department of Dentistry
Sri Lakshmi Narayana
Institute of Medical Sciences
Osudu, Agaram, Puducherry.

Encl: Certificates

Photographs