



Navodaya Education Trust ®  
**Navodaya Dental College**  
Raichur



**Revised Ordinance Governing**  
**BACHELOR OF DENTAL SURGERY (BDS) Degree Course**  
**RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES**

**KARNATAKA**

**4th 'T' Block, Jayanagar, Bangalore 560041.**

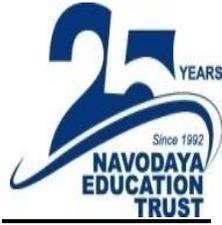
**AIMS AND OBJECTIVE:**

**Aims**

The dental graduates during training in the institutions should acquire adequate knowledge, necessary skills and such attitudes which are required for carrying out all the activities appropriate to general dental practice involving the prevention, diagnosis and treatment of anomalies and diseases of the teeth, mouth, jaws and associated tissues. The graduate should also understand the concept of community oral health education and be able to participate in the rural health care delivery programmes existing in the country.

**Objectives**

The objectives are dealt under three headings namely (a) knowledge and understanding (b) skills and (c) attitudes.



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Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life.

To help and to participate in the implementation of national health programmes.

### **Knowledge and understanding**

The graduate should acquire the following during the period of training.

Adequate knowledge of clinical disciplines and methods, which provide a coherent picture of anomalies

Adequate knowledge of biological function and behaviour of persons in health and sickness as well as the influence of the natural and social environment on the state of health

**Skills:** A graduate should be able to demonstrate the following skills necessary for practice of dentistry.

Able to diagnose and manage various common dental problems encountered in general dental practice, keeping in mind the expectations and the right of the society to receive the best possible treatment available wherever possible.

Promote oral health and help to prevent oral diseases wherever possible.

### **DESIRABLE TO KNOW**

Transport mechanisms

Neuromuscular junction, excitation contraction coupling, Myasthenia gravis, Rigor Mortis Body fluid compartments

Principles of measurement, normal values

Blood: Development of WBC's & platelets Electrophoresis, Plasma pheresis Blood bank.



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Respiratory system:

Compliance of the lungs

P 50 value, Co-efficient of oxygen utilization  
Dysbarism, Dyspnoea -  
Dyspnoeic index

Non-respiratory function of respiratory system.

Cardio vascular system :

Cardiovascular changes in muscular exercise.

Renal system:

TmG, renal threshold for glucose, tubular load  
for glucose. Counter current mechanism

Endocrinology:

Synthesis of thyroid hormone.

Disorders - Addison's disease, Cushing's syndrome, Conn's  
Syndrome, Adrenogenital syndrome, Pheochromocytoma

**Practicals:**

1. Reactions of monosaccharides - glucose & fructose
2. Reactions of disaccharides - lactose, maltose and sucrose.
3. Preparation of osazones from glucose, fructose, lactose & maltose
4. Reactions of polysaccharides - starch
5. Identification of unknown carbohydrate
6. Colour reactions of proteins - albumin.
7. Colour reactions of proteins - gelatin & peptone.
8. Colour reactions of proteins - casein.



9. Precipitation reactions of albumin
10. Precipitation reactions of gelatin and peptone
11. Precipitation reactions of - casein
12. Identification of unknown protein
13. Reactions of urea, uric acid and creatinine
14. Identification of physiologically important constituents.
15. Composition of saliva and starch digestion by salivary amylase.
16. Qualitative analysis of gastric juice - normal and abnormal contents
17. Urine analysis - normal constituents.
18. Urine analysis - abnormal or pathological constituents.
19. Determination of titrable acidity and ammonia content in urine.
20. Determination of creatinine content in urine, calculation of creatinine clearance.
21. Estimation of Blood glucose.

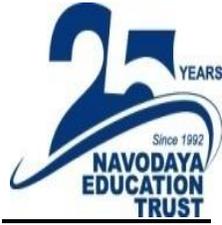
**Demonstration Sessions: (Desirable to know)**

1. Colorimeter
2. Electrophoresis & Chromatography
3. Estimation of Serum calcium and phosphorus
4. Estimation of Bilirubin
5. Estimation of Urea in blood
6. Estimation of total protein in blood serum
7. Preparation of haemin crystals
8. Discussion of clinical charts - Glucose Tolerance Test (GTT)
9. Spotting of specimens -  
Haemin, Osazone - Microscopy, Ryle's tube, Folin -wu tube, Urinometer, Tests - Biuret reaction, Millon's reaction, Jaffe's reaction, Barfoed's reaction.

**GENERAL PATHOLOGY:**

**Practical's That Must Be Done By Students:**

- Determination Of Haemoglobin Percentage
- Blood Grouping.
- Total Leukocyte Count
- Bleeding Time, Clotting Time
- Peripheral Blood Smear - Staining & Study
- Differential Leukocyte Count.
- Urine Examination - For Sugar, Ketone Bodies, Protein, Blood, Bile Pigments And Bile Salts - Any One Standard Test.



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## **GENERAL MEDICINE:**

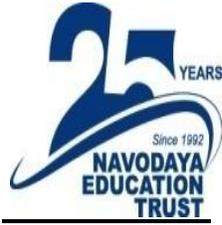
Special emphasis should be given throughout on the importance of various diseases.

A dental student should be taught in such a manner that he is able to record the pulse, blood pressure and be capable of suspecting by sight and superficial examination of the body, diseases of the heart, lungs, kidneys, blood etc.

### **Aims:**

- Medicine, definition of diagnosis, treatment & prognosis. History taking, physical examination of the patient, diagnosis and management of disease.
- Genetics and disease Medical Ethics.
- Infections: Enteric fever, HIV, Herpes simplex, Herpes zoster, Syphilis, Diphtheria, Malaria, Actinomycosis, Viral hepatitis, Tuberculosis
- GIT: Stomatitis, Gingival hyperplasia, Dysphagia, Acid peptic disease, Jaundice, Acute and chronic hepatitis, Cirrhosis of liver, Ascitis, Amoebiasis, Tender hepatomegaly, Hepatotoxic drugs, Portal hypertension.
- Diarrhoea and dysentery including Malabsorption syndromes, Helicobacter pylori
- Critical care medicine: Syncope, Cardiac Pulmonary Resuscitation (CPR), Anaphylaxis, Allergy, Angio-neurotic edema.
- Endocrine: Diabetes Mellitus

The student must be able to take history, do general physical examination (including build, nourishment, pulse, BP temperature, edema, cyanosis, clubbing, jaundice, lymphadenopathy, oral, cavity) and be able to examine cardiovascular and respiratory systems, abdomen and the facial nerve and signs of meningeal irritation



### **PUBLIC HEALTH DENTISTRY:**

1.	Dentistry, Scope, aims and objectives of Dentistry.
2.	Health & Disease: - Concepts, Philosophy, Definition & Characteristics
3.	Public Health: - Definition & Concepts, History of public health
4.	Dentist Act 1948 with amendment. Dentist Council of India and state Dental Councils
5.	Composition and responsibilities.
6.	Indian Dental association
7.	Head Office, State and local branches

#### **Aims:**

- To Understand the community aspects of dentistry
- To take up leadership role in solving community oral health programme
- To gain hands on experience on research methodology.

#### **Purpose:**

- Apply the theory and practice of epidemiology, planning and evaluation, statistics to dental public health. Most of the students are unfamiliar with research and hence this short term project which will be divided across 2 years
- Collection of statistical data (demographic) on population in India, birth rates, morbidity and mortality, literacy, per capita income
- Incidence and prevalence of common oral diseases like dental caries, periodontal disease, oral cancer, fluorosis at national and international levels.
- Oral health status assessment of the community using indices and WHO basic oral health survey methods collection

#### **Field visits:**



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- Visit to primary health centre-to acquaint with activities and primary health care delivery
  - Visit to water purification plant/public health laboratory/ centre for treatment of western and sewage water
  - Visit to institution for the care of handicapped, physically, mentally, or medically compromised patients

### **Preventive Dentistry:**

Including case history, recording of indices, application of pit and fissure sealants, fluoride gel application procedure, A. R. T.

Health talk : Minimum of 12 per year

## **ETHICS IN DENTISTRY**

### Introduction

There is a definitive shift now from the traditional patient and doctor relationship and delivery of dental care. With the advances in science and technology and the increasing needs of the patient, their families and community, there is a concern for the health of the community as a whole. There is a shift to greater accountability to the society. Dental specialists like the other health professionals are confronted with many ethical problems. It is therefore absolutely necessary for each and every one in the health care delivery to prepare themselves to deal with these problems. To accomplish this and develop human values, it is desired that all the trainees undergo ethical sensitization by lectures or discussion on ethical issues, discussion of cases with an important ethical component.

### **Course content:**



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### **Introduction to Ethics**

- What is ethics?
- What are values and norms?
- How to form a value system in one's personal and professional life?
- Hippocratic oath.
- Declaration of Helsinki, WHO declaration of Geneva, International code of ethics, D.C.I. Code of ethics.

### **Ethics of the Individual**

The patient as a person  
Right to be respected  
Truth and confidentiality  
Autonomy of decision Doctor Patient relationship

### **Professional Ethics**

Code of conduct

Contract and confidentiality  
Charging of fees, fee splitting  
Prescription of drugs

Over-investigating the  
patient

Malpractice and  
negligence