

HIGHER NATIONAL DIPLOMA

1.0 PROGRAMME NOMENCLATURE

Higher National Diploma in Dental Technology

2.0 GOAL

This programme is designed to produce Technologists equipped with the knowledge and skill to plan, collate organize, disseminate monitor and manage vital information required at the local, state and national levels in order to ensure effective and comprehensive national health care delivery

3.0 OBJECTIVES OF THE PROGRAMME

A diplomate of this programme should be able to:

- i. Plan and organize health information services in health care delivery system.
- ii. Organise and control health records, in health and medical establishments.
- iii. Supervise the collecting, storing, retrieved and preservation of health information
- iv. Collate, analyse and present health statistical data.
- v. Participate in planning quality control, evaluation, researches in health care delivery system and other relevant committees in defining standards for health information
- vi. Design, standardize and control health records forms

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4.0 LEVEL OF PROGRAMME

Higher National Diploma

5.0 DURATION

The duration of the programme shall be two academic sessions of four semesters

6.0 ENTRY REQUIREMENT

Applicants with the following qualifications may be considered for admission into the Higher National Diploma programme.

I] In addition to the specific entry requirements for the ND programme for Dental Technology, the candidate for the HND programme must meet the following entry requirements for the HND programme:

A.National Diploma Certificate in Health Information Management with a minimum of a lower credit.

B.Evidence of completion of one year relevant work experience in an accredited health institution approved by the Board.

C.Candidates with a Pass (GPA 2.00 - 2.49) at the ND level with two (2) or more years post-ND cognate work experience may be considered for admission into the HND program

7.0 PROGRAMME STRUCTURE 7.0 STAFFING REQUIREMENTS

7.1 Core Teaching Staff

A minimum of four (4) lecturers are required for one stream (40 students). Core teaching staff should possess at least a BSc. in Dental Technology or related discipline.

- 7.2 Technical Staff
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Technical staff should possess ND/HND in Technology or related discipline. **7.3 Headship of the Department**

The Head of Department shall;

- Possess not less than a Master's degree in Dental Technology or related discipline.
- Have at least 10 years industrial/teaching experience
- Be a Member of relevant professional body
- Be of the rank of Senior Lecturer or above

7.4 Carrier/Academic Prospects

The diplomats would work as Dental Technologists Officer. They can also proceed for PGD and M.Sc. in Dental Technology or related discipline.

8.0CURRICULUM

The curriculum of all HND programmes consists of five main components. These are:

- i. General Studies/Education
- ii. Basic/Foundation Courses
- iii. Professional/Specialized Courses

iv. Electives. 9.0 DURATION

The Higher National Diploma is a two year terminal academic programme.

10.0 CERTIFICATION

A graduand of this programme will be awarded HND in Dental Technology.

11.0 CONDITIONS FOR THE AWARD OF ND CERTIFICATE

Institutions offering accredited programmes will award the Higher National Diploma to candidates who successfully completed the programme after passing the prescribed course work, examinations, diploma project and attendance.

12.0 PROFESSIONAL CERTIFICATION EXAMINATION.

A graduate of the HND Dental Technology programme must have to sit and pass the professional certification examination of the Dental Technologists Registration Board of Nigeria (DTRBN) to be licensed to practice as a Technologist Practitioner in Nigeria.

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TCAL **CURRICULUM TABLE** HND PROGRAMME IN DENTAL TECHNOLOGY

LEVEL: HND	[
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1ST SEMESTER

	COURSE CODE	COURSE TITLE	L	P	CU	СН	CH/SEM
	DTE 311	Science of Dental Materials II	1		2	2	30
	DTE 312	Fixed Prosthodontics		2	3	3	45
	DTE 314	Complete Denture Prosthodontics I		2	3	3	45
	DTE 315	Dental Prosthodontics III	1	2	3	3	45
	DTE 316	Functional Anatomy of Mastication, Swallowing and Speech	1	0	1	1	15
	DTE 317	Orthodontics Technology I	1	2	3	3	45
	DTE 318	Dental Radiology	1	1	2	2	30
	STA 224	Biostatistics	2	0	2	2	30
	DTS 301	Pharmacology II	2	0	2	2	30
	DTS 302	Primary Oral Health Care	2	0	2	2	30
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COUDSE CODE	COUDSE TITI E	т	D 🔨		СЧ	(
PLT 211	Polymer Chemistry	<u> </u>		1	1	C
DTE	Digital Dental Technology	2	$\dot{1}$	3	3	
GNS 228	Introduction to Psychology	2	g	2	2	
DTE 321	Dental Prosthodontics IV	2	0	2	2	
DTE 322	Orthodontic Technology II		0	2	2	
DTSS 323	Gerontology	2	0	2	2	
STM 312	Bacteriology	1	1	2	2	
DTE 321	Dental Health Education & Promotion	1	1	2	2	
DTS 303	Population studies	1	1	2	2	
DTS 304	Health Policy & Administration	2	0	0	0	
	TOTAL					
	ALBOREL					

COURSE CODE	COURSE TITLE	L	Р	CU	CH	CH/SE
DTE 321	Advanced Dental Practice	1	1	3	45	45
NUD 433	Research Methodology	2		1	15	15
DTE 411	Complete Denture Prosthodontics II	2		2	30	30
DTE 412	Orthodontic Technology (Fixed) II	2	-	2	30	30
DTE 413	Metallic Prosthodontic I		-	1	15	15
DTE 414	Ethics and Jurisprudence in Dental Technology	2	-	2	30	30
DTE 415	Science of Dental Material III (Ceramics)	2	-	2	30	30
DTE416	Implantology	2	-	2	30	30
EeD 413	Entrepreneurship Development	2	-	2	30	30
DTE417	Gerodonthology	2	-	2	30	30
	TOTAL					345

CAL HND PROGRAMME IN DENTAL TECHNOLOGY 2ND SEMESTER

LEVEL: HND II

COURSE CODE	COURSE TITLE	L	P	CU	СН	CH/S
	Introduction to Maxillio Facial		C)			
DTE 421	Prosthodontics	1	2	3	3	4
			2	3	3	4
DTE 423	Fixed Prosthodontics II	1	2	3	3	4
DTE 424	Project	0	6	6	6	9
DTS	Quality Control Assurance	2	0	2	2	30
DTS	CAD/CAM	1	1	2	2	30
	TOTAL					31
	TOTAL					3

PROGRAMME: HND Dental Technology			
COUDSE TITLEL Science of Dantal Materials H			\sim
COURSE ITTLE: Science of Dental Materials II			
DURATION Lecture: 1 Hr	Tutorial.	Practical. 1 Hr	Total: 2Hrs/W/k (30Hrs/Som)
CREDIT UNITS: 2 CU	1 0101141		10tal 21115/WK (301115/36iii)
GOAL: This course is designed to dever materials used in dental technology pract	lop the students und	lerstand and application	of dental alloys, modelling and investment
GENERAL OBJECTIVES: On compl	etion of the course,	the student should be abl	e to:
 1.0 Know dental alloys and polymer b 2.0 Understand the effect of heat treatment 3.0 Understand the materials and technic 4.0 Understand the use and importance 	ase materials in den nent on the propertie iques for soldering of investment and	tal technology practice es of dental alloys and welding modelling materials in de	ental technology
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COURSE TITLE: Science of Dental I	Materials II	Cou	rse Code: DTE 311	Con	tact Hours: 2Hrs	/Wk (30Hrs/Sem)
COURSE SPECIFICATION: Theorem	tical content				Practical Con	tent:
General Objective: 1.0 Know dental a	alloys and polymer	base materials in dental	technology practice			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 1.1 Define an alloy 1.2 List the various types of alloys e.g. binary and eutectic 1.3 Describe the components and properties of the alloys in each category in 1.2 above 1.4 Identify commonly used alloys in dental technology practices e.g. gold alloys, chrome-cobalt, etc. 1.5 Explain the choice of alloys used in prosthetic surgery 1.6 Explain the effect of heat treatment on chosen alloys in 1.4 above 1.7 Carry out heat treatment of a name alloy 	Define Alloys List Varoius types of alloy. Describe Components of Alloys Describe properties of Alloys.	Quintessence of Denta Technology. Alloys Textbooks, Charts and Forms, Reading materials	I dentify commonly used alloys in Dental Technology practices e.g. gold alloys, chrome-cobalt, etc.	Define Alloys List Varoius types of alloy. Describe Components of Alloys Describe properties of Alloys.	Quintessence of Dental Technology. Alloys Textbooks, Charts and Forms, Reading materials.	Students to define Alloys Students to list types of Alloys Students to list components of Alloys Students to list properties of Alloys
 1.8 Define polymer (with example) 1.9 Describe the components and properties of various polymers in 1.8 above 	Define polymer	Polymer Textbooks, Charts and Forms, Reading	Define polymer		Polymer Textbooks, Charts and	Students to define polymer.

 1.10 Identify the commonly used polymer in dental technology practices e.g. polymethyl- metacrylate (acrylic) 1.11 Define composite resins 1.12 Describe the constituents and properties of composite resins 1.13 Define the following Condensation Polymerization 1.14 Describe the processes involved in condensation and polymerization in relation to dental technology practice 	Identify the commonly used polymer in dental technology practices e.g. polymethyl- metacrylate (acrylic)	materials.	Identify the commonly used polymer in dental technology practices e.g. polymethyl- metacrylate (acrylic)		Forms, Reading materials.	Students to identify commonly used polymer in dental technology practices.
General Objective: 2.0 Understand th	e effect of heat trea	atment on the properties of	dental alloys			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning	Teachers Activities	Learning Resources	Evaluation
			Objectives:			
2.1 Define heat treatment	Define Heat	Textbooks, Charts and	Objectives: To define	Define Heat	Textbooks,	Students to define Heat
2.1 Define heat treatment2.2 Describe the principles of	Define Heat Treatment	Textbooks, Charts and Forms, Reading	Objectives: To define Heat	Define Heat Treatment	Textbooks, Charts and	Students to define Heat Treatment
 2.1 Define heat treatment 2.2 Describe the principles of heat treatment 2.3 List alloys that could be heat treated e.g. stainless steel, gold alloys, etc 2.4 Carry out heat treatment of a chosen material 2.5 List the constituents and 	Define Heat Treatment Describe the principles of heat treatment	Textbooks, Charts and Forms, Reading materials.	Objectives: To define Heat Treatment	Define Heat Treatment Describe the principles of heat treatment Treat a	Textbooks, Charts and Forms, Reading materials.	Students to define Heat Treatment Students to describe the principles of heat treatment.
 2.1 Define heat treatment 2.2 Describe the principles of heat treatment 2.3 List alloys that could be heat treated e.g. stainless steel, gold alloys, etc 2.4 Carry out heat treatment of a chosen material 2.5 List the constituents and properties of heat treatment 	Define Heat Treatment Describe the principles of heat treatment	Textbooks, Charts and Forms, Reading materials.	Objectives: To define Heat Treatment	Define Heat Treatment Describe the principles of heat treatment Treat a chosen	Textbooks, Charts and Forms, Reading materials.	Students to define Heat Treatment Students to describe the principles of heat treatment. Students to list the
 2.1 Define heat treatment 2.2 Describe the principles of heat treatment 2.3 List alloys that could be heat treated e.g. stainless steel, gold alloys, etc 2.4 Carry out heat treatment of a chosen material 2.5 List the constituents and properties of heat treatment alloys 	Define Heat Treatment Describe the principles of heat treatment	Textbooks, Charts and Forms, Reading materials.	Objectives: To define Heat Treatment	Define Heat Treatment Describe the principles of heat treatment Treat a chosen material	Textbooks, Charts and Forms, Reading materials.	Students to define Heat Treatment Students to describe the principles of heat treatment. Students to list the constituents and properties of heat
 2.1 Define heat treatment 2.2 Describe the principles of heat treatment 2.3 List alloys that could be heat treated e.g. stainless steel, gold alloys, etc 2.4 Carry out heat treatment of a chosen material 2.5 List the constituents and properties of heat treatment alloys 2.6 List the properties 	Define Heat Treatment Describe the principles of heat treatment List the constituents	Textbooks, Charts and Forms, Reading materials.	Objectives: To define Heat Treatment	Define Heat Treatment Describe the principles of heat treatment Treat a chosen material List the	Textbooks, Charts and Forms, Reading materials.	Students to define Heat Treatment Students to describe the principles of heat treatment. Students to list the constituents and properties of heat

obtainable from the alloys after heat treatment 2.7 Demonstrate with diagrams the grain structure of heat treated alloys	and properties of heat treatment alloys			constituents and properties of heat treatment alloys		treatment alloys.
General Objective: 3.0 Understand the Specific Learning Objectives:	e materials and tech Teachers	hniques for soldering and w Learning Resources	elding Specific	Teachers	Learning	Evaluation
	Activities		Learning	Activities	Resources	
 3.1 Define the following: Soldering Speed of soldering Welding Welding Fluxes Fluxes Solder Sweating 3.2 Describe the mechanism of Governing Joining'' in soldering List the types, composition and properties of fluxes A Describe the various methods of heating Sexplain the principle of soldering List the various types of 	Define -Soldering -Speed of soldering -Welding -Fluxes -Solder -Sweating -Spot welding List the types, composition and properties of fluxes	Textbooks, Charts and Forms, Reading materials.	To define Define -Soldering -Speed of soldering -Welding -Fluxes -Solder -Sweating -Spot welding To list the types, composition and properties of	To define Define - Soldering -Speed of soldering -Welding -Fluxes -Solder -Sweating -Spot welding	Textbooks, Charts and Forms, Reading materials.	Students to define terms used in Soldering;- -Soldering -Speed of soldering -Welding -Fluxes -Solder -Sweating -Spot welding Students to list the types, composition and properties of fluxes
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solders, composition and their			fluxes			'
properties 3.7 List the major hand tools and equipment used in soldering 3.8 Solder two joints together 3.9 Explain the general principles of spot welding 3.10 Identify the tools and equipment used in welding	List the major hand tools and equipment used in soldering		To list the major hand tools and equipment used in soldering	CAL		Students to list the major hand tools and equipment used in soldering
General Objective: 4.0 Understand th	e use and importan	ce of investment and n	nodelling materials in	dental technolog	y Taannina	Enclustion
Specific Learning Objectives:	Activities	Learning Resources	Learning	Activities	Resources	Evaluation
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4A,						

 4.1 List the constituents and ideal properties of: i. Investment materials ii. Modelling materials 4.2 List various types of investment materials apacifying 	List the constituents and ideal properties of:- Investment materials	Textbooks, Charts and Forms, Reading materials. Gypsum	To list the constituents and ideal properties of:-	List the constituents and ideal properties of:-	Textbooks, Charts and Forms, Reading materials. Gypsum	Students to list the constituents and ideal properties of:- -Investment materials -Modelling materials
those for precious and non- precious metals4.3 List various types of modelling materials.	Modelling materials List various types of modelling materials.		Modelling materials To list various types of modelling	Modelling materials List various types of modelling materials		Students to List various types of modelling materials
 4.4 Define the following: i. Hygroxopic expansion ii. Thermal expansion iii. Setting expansion iv. Inversion change 	Define the following: Hygroxopic expansion Thermal expansion Setting expansion Inversion	RDFOR,	materials.	materials.	Textbooks, Charts and Forms, Reading materials.	Students to define the following: Hygroxopic expansion Thermal expansion Setting expansion Inversion change.
4.5 State the uses of modelling materials (give examples e.g. plaster of Paris, stone plaster, etc.)	change.				Gypsum	
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 4.6 Explain the industrial production of plaster of Paris from Gypsum. 4.7 Describe the chemistry of reaction in 4.6 above 4.8 List the composition of dental plaster and stone plaster 4.9 Explain the factors responsible for the setting of plaster of Paris and stone plaster 	Explain the industrial production of plaster of Paris from Gypsum.	Textbooks, Charts and Forms, Reading materials. Gypsum	To explain the industrial production of plaster of Paris from Gypsum.	Explain the industrial production of plaster of Paris from Gypsum.	Students to explain the industrial production of plaster of Paris from Gypsum.
 4.10 State the difference between plaster of Paris and stone plaster 4.11 Describe the procedure for measuring the setting time of plaster of Paris 4.12 Identify the equipment used if measuring the setting time of plaster of Paris 	Identify the equipment used if measuring the setting time of plaster of Paris	ant or '	To identify the equipment used if measuring the setting time of plaster of Paris	Identify the equipment used if measuring the setting time of plaster of Paris	To identify the equipment used if measuring the setting time of plaster of Paris
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COURSE TITLE: Fixed Prosthodontics (conservatives) COURSE CODE: DTE 312 DURATION Lecture:- 2 Hrs Tutorial:- Practical:- 3 Hrs Total:- 5Hrs/Wk (75Hr CREDIT UNITS: 2 CU GOAL: This course is designed to enable the student understand the principles of crown and bridge in relation to additive GAL: This course is designed to enable the student understand the principles of crown and bridge in relation to additive GENERAL OBJECTIVES: On completion of the course, the student should be able to: 1.0 Understanding of the terms associated with ceramics and bridgework (Fixed Prosthodontics) 2.0 Know the application of the component parts and types of bridges, inlay add crowns necessary for the fabrication of fixed prosthodont 3.0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 4.0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 5.0 Know factors determining selection of alloy types and counce of relation to aesthetics and function PROGRAMME: HND Dental Technology Course Code: DTE 312 Contact Hours: SHrs/Wk (75Hr 13	DURSE TITLE: Fixed Prosthodonties (conservatives) DURSE CODE: DTE 312 URATION Lecture:-2 Hrs Tutorial:- Practical:- 3 Hrs Total:- 5Hrs/Wk (75Hrs/Sem REDIT UNITS: 2 CU OAL: This course is designed to enable the student understand the principles of crown and bridge in relation to acquire the student understand the principles of crown and bridge in relation to acquire the student understand the principles of crown and bridge or completion of the course, the student should be able to: 0 Understanding of the terms associated with ceramics and bridgework (Fixed Possiboliumics) 0 Know the application of the component parts and types of bridges, inlay add prowns necessary for the fabrication of fixed prosthodontics. 0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 0 Know methods of control for dental refractories, waxes and allow types in relation to aesthetics and function OGGRAMME: HND Dental Technology UNDER TITLE: Fixed Prosthodonuics ponservatives) 18 Course Code: DTE 312 Contact Hours: SHrs/Wk (75Hrs/Sem		D Dental Technology			
COURSE CODE: DTE 312 DURATION Lecture: - 2 Hrs Tutorial: - Practical: - 3 Hrs Total: - 5Hrs/Wk (75Hr CREDIT UNITS: 2 CU GOAL: This course is designed to enable the student understand the principles of crown and bridge in relation to achieve achieve GOAL: This course is designed to enable the student understand the principles of crown and bridge in relation to achieve GENERAL OBJECTIVES: On completion of the course, the student should be able to: 1.0 Understanding of the terms associated with ceramics and bridgework (Fixed Broshodontics) 2.0 Know the application of the component parts and types of bridges, inlay and crowns necessary for the fabrication of fixed prosthodont 0.0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 4.0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function ROGRAMME: HND Dental Technology Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr 18	OURSE CODE: DTE 312 URATION Lecture: 2 Hrs Tutorial:- Practical:- 3 Hrs Otal: - 5Hrs/Wk (75Hrs/Sem REDIT UNITS: 2 CU OAL: This course is designed to enable the student understand the principles of crown and bridge in relation to abductic ENERAL OBJECTIVES: On completion of the course, the student should be able to: 0 Understanding of the terms associated with ceramics and bridgework (Fixed Prosthoutortics) 0 Understanding of the terms associated with ceramics and bridgework (Fixed Prosthoutortics) 0 0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 0 Know methods of control for dental refractories, waxes and allow the relation to aesthetics and function OGRAMME: HND Dental Technology Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sem 18	COURSE TITLE: F	ixed Prosthodontics (conservativ	ves)		
DURATION Lecture: 2 Hrs Tutorial:- Practical:- 3 Hrs Total:- 5 Hrs/Wk (75 Hr CREDIT UNTS: 2 CU GOAL: This course is designed to enable the student understand the principles of crown and bridge in relation to accherate Generation Generation I.0 Understanding of the terms associated with ceramics and bridgework (Fixed Prosthodontics) Row the application of the component parts and types of bridges, inlay and crown's necessary for the fabrication of fixed prosthodont 3.0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 4.0 Know methods of control for dental refractories, waxes and allow the relation to aesthetics and function 5.0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function ROGRAMME: HND Dental Technology Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr) 18 18 Contact Hours: 5Hrs/Wk (75Hr)	URATION Lecture: 2 Hrs Tutorial:- Practical:- 3 Hrs Intal:- 5 Hrs/Wk (75Hrs/Sem REDIT UNITS: 2 CU OAL: This course is designed to enable the student understand the principles of crown and bridge in relation to addition ENERAL OBJECTIVES: On completion of the course, the student should be able to: 0 Understanding of the terms associated with ceramics and bridgework (Fixed Prosthodontics) 0 Know the application of the component parts and types of bridges, inlay addentworks necessary for the fabrication of fixed prosthodontics. 0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 0 Know methods of control for dental refractories, waxes and allows used in relation to aesthetics and function Viderstand the shaping selection of alloy types and ceraptics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceraptics in relation to aesthetics and function Viderstand HP ND Dental Technology Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sem 18 Item Prosthodontics to the student with the principles of the student with	COURSE CODE: D	TE 312			
CREDIT UNITS: 2 CU GOAL: This course is designed to enable the student understand the principles of crown and bridge in relation to aechetic GENERAL OBJECTIVES: On completion of the course, the student should be able to: 1.0 Understanding of the terms associated with ceramics and bridgework (Fixed Prosthodomics) 2.0 Know the application of the component parts and types of bridges, inlay add crowns necessary for the fabrication of fixed prosthodom 3.0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 4.0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 5.0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function PROGRAMME: HND Dental Technology Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr 18 18 Contact Hours: 5Hrs/Wk (75Hr	REDIT UNITS: 2 CU OAL: This course is designed to enable the student understand the principles of crown and bridge in relation to adducte ENERAL OBJECTIVES: On completion of the course, the student should be able to: 0 Understanding of the terms associated with ceramics and bridgework (Fixed Preshedentics) 0 Know the application of the component parts and types of bridges, inlay addressing necessary for the fabrication of fixed prosthodontics. 0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 0 Know factors determining selection of alloy types and counters in relation to aesthetics and function VIRSE TITLE: Fixed Prosthodontics ponservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18 18 18 Interview of the student principles of the s	DURATION	Lecture:- 2 Hrs	Tutorial:-	Practical:- 3 Hrs	Total:- 5Hrs/Wk (75Hrs/Sem)
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GENERAL OBJECTIVES: On completion of the course, the student should be able to: 1.0 Understanding of the terms associated with ceramics and bridgework (Fixed Prosthodontics) 2.0 Know the application of the component parts and types of bridges, inlay and provints necessary for the fabrication of fixed prosthodont 3.0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 4.0 Know methods of control for dental refractories, waxes and allow used in crowns and bridges 5.0 Know factors determining selection of alloy types and ceraptics in relation to aesthetics and function ROGRAMME: HND Dental Technology Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr) 18 18	EXERAL OBJECTIVES: On completion of the course, the student should be able to: 0 Understanding of the terms associated with ceramics and bridgework (Fixed Preshodontics) 0 Know the application of the component parts and types of bridges, inlay addretowns necessary for the fabrication of fixed prosthodontics. 0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 0 Know factors determining selection of alloy types and computers in relation to aesthetics and function VOGRAMME: HND Dental Technology URSE TITLE: Fixed Prosthodontics wonservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sem 18	GOAL: This course	is designed to enable the student un	nderstand the principles of cro	wn and bridge in relation to aes	heric
.0 Understanding of the terms associated with ceramics and bridgework (Fixed Presthodontics) .0 Know the application of the component parts and types of bridges, inlay and crowns necessary for the fabrication of fixed prosthodont .0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics .0 Know methods of control for dental refractories, waxes and allow used in crowns and bridges .0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function ROGRAMME: HND Dental Technology Ourse Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr 18 18	0 Understanding of the terms associated with ceramics and bridgework (Fixed Prosthodontics) 0 Know the application of the component parts and types of bridges, inlay and prowns necessary for the fabrication of fixed prosthodontics. 0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 0 Know methods of control for dental refractories, waxes and allows treat in crowns and bridges 0 Know factors determining selection of alloy types and ceremics in relation to aesthetics and function OURGRAMME: HND Dental Technology DURSE TITLE: Fixed Prosthodontics toonservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sem 18	ENERAL OBJECT	TVES: On completion of the cour	rse, the student should be able	to:	
0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function OURSE TITLE: Fixed Prosthodoatics (conservatives) Course Code: DTE 312 Outact Hours: 5Hrs/Wk (75Hr 18	0 Understand the shaping of labial, lingual and proximal surfaces in relation to aesthetics, oral hygiene and phonetics 0 Know methods of control for dental refractories, waxes and allow used in crowns and bridges 0 Know factors determining selection of alloy types and commence in relation to aesthetics and function Contact Hours: 5Hrs/Wk (75Hrs/Sem 18 OURSE TITLE: Fixed Prosthodoutics reformervatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sem 18	.0 Know the ap	pplication of the component part	ts and types of bridges, inla	y and crowns necessary for th	e fabrication of fixed prosthodontics.
4.0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 5.0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 7.0 RogRAMME: HND Dental Technology 20URSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr 18 18	0 Onderstand the shaping of fabra, ingular and proximal surfaces in relation to aesthetics, or an hygiene and phoneucs 0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 0 Know factors determining selection of alloy types and ceraptics in relation to aesthetics and function Outerstand the shaping of fabra, ingular and proximal surfaces in relation to aesthetics and bridges 0 Know factors determining selection of alloy types and ceraptics in relation to aesthetics and function OUTREMEMBED Entitle Technology DURSE TITLE: Fixed Prosthodouties (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sem 18	2.0 Understand	the chaping of lobial linguel on	d provinal surfaces in rela	ion to easthating, and hygian	and phonetics
4.0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 5.0 Know factors determining selection of alloy types and ceratrics in relation to aesthetics and function Source Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr 18 18	0 Know methods of control for dental refractories, waxes and allows used in crowns and bridges 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function 0 Know factors deter	5.0 Onderstand	the shaping of fabrai, fingual and		ion to aesthetics, or ar hygiend	e and phonetics
5.0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function PROGRAMME: HND Dental Technology 20URSE TITLE: Fixed Prosthodoutics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr) 18	0 Know factors determining selection of alloy types and ceramics in relation to aesthetics and function ROGRAMME: HND Dental Technology DURSE TITLE: Fixed Prosthodoutics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18	4.0 Know metho	ods of control for dental refracto	pries, waxes and alloys used	Fin crowns and bridges	
PROGRAMME: HND Dental Technology COURSE TITLE: Fixed Prosthodoutics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr 18	KOGRAMME: HND Dental Technology DURSE TITLE: Fixed Prosthodoutics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18	5.0 Know factor	rs determining selection of alloy	y types and ceramics in rela	tion to aesthetics and function	I
PROGRAMME: HND Dental Technology COURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr 18	ROGRAMME: HND Dental Technology Ourse Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18 18					
PROGRAMME: HND Dental Technology COURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hr 18	COGRAMME: HND Dental Technology DURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18					
PROGRAMME: HND Dental Technology COURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hi 18	ROGRAMME: HND Dental Technology DURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18					
PROGRAMME: HND Dental Technology COURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hi 18	ROGRAMME: HND Dental Technology DURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18					
PROGRAMME: HND Dental Technology COURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hi 18	ROGRAMME: HND Dental Technology DURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18 18			P		
COURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75H) 18 18	DURSE TITLE: Fixed Prosthodontics (conservatives) Course Code: DTE 312 Contact Hours: 5Hrs/Wk (75Hrs/Sen 18 18					
18		PROGRAMME: HN	D Dental Technology			
		PROGRAMME: HN COURSE TITLE: F	D Dental Technology ixed Prosthodontics (conservativ	ves) Cou	rse Code: DTE 312	Contact Hours: 5Hrs/Wk (75Hrs/Sem)
		PROGRAMME: HN COURSE TITLE: F	D Dental Technology ixed Prosthodontics (conservativ	/es) Cou	rse Code: DTE 312	Contact Hours: 5Hrs/Wk (75Hrs/Sem)
		PROGRAMME: HN COURSE TITLE: F 18	D Dental Technology ixed Prosthodontics (conservativ	zes) Cou	rse Code: DTE 312	Contact Hours: 5Hrs/Wk (75Hrs/Sem)
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		ROGRAMME: HN OURSE TITLE: F 18	D Dental Technology ixed Prosthodontics (conservativ	zes) Cou	rse Code: DTE 312	Contact Hours: 5Hrs/Wk (75Hrs/Sem

COURSE SPECIFICATION: The	oretical content		Practical Content:			
General Objective: 1.0 Understand	bridgework (Fixe	ed Prosthodontics)	\sim			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
1.1 Define and explain the	Lecture	Textbooks, Charts and				Quiz
following: i. Crown (Metallic and	Explain the	Forms, Reading materials.				Tests
nonmetallic) e.g. full	concepts covered		Á			Assignment
veneer (shell), partial veneer/ bonded crowns, combination, jacket, Pressables ceramic, post-retained. Temporary crowns etc.			ECH			Examination
ii. Bridgesiii. Classes of inlay e.g.		æ	*			
iv. Onlays						
v. Post and core						
vi. Occlusal rests						
vii. Pinledge		$\delta \mathbf{V}$				
viii. Pontic and pontic						
aesigns ix Abutment						
x. Cervical margin,		Y				
gingival margin						
xi. Dies and master casts; stone dies, amalgam						
ores electroformed						

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construction of bridges and specify reasons					O'S	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.	CHI I			Quiz Tests Assignment Examination
General Objective: 3.0 Understand	the shaping of labia	al, lingual and proximal surface	ces in relation to	aesthetics, oral h	ygiene and ph	onetics
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 3.1 Define and explain the following terms: Labial Surface Lingual surface Proximal surface Proximal surface Aesthetics Phonetics 3.2 Describe the process of achieving the following surfaces on restorations (ceramics or bonded crowns and shells): 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination

i. Labial ii. Lingual						
iii. Proximal						
rfaces in 4.2 above						
A Shape the surface in A 2						
hove to reflect aesthetics						
vgiene and phonetics						
eneral Objective: 4.0 Know metho	ds of control for den	tal refractories, waxes an	d alloys used in crow	vns and bridges		
		I		y	1	
oecific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
1 State the constituents and	Lecture	Textbooks, Charts and				Quiz
properties of the following:	Englain the	Forms, Reading				Tests
i. dental refractories	concepts covered	materials.				Tests
(gypsum bonded	concepts covered					Assignment
investment, silica						Examination
bonded and expansion						
liquids, rapid cast)		\sim				
ii. Inlay Waxes						
iii. Dental alloys (Non						
precious and Precious						
metals)		*				
2 Explain the significant						
chemical reactions in the						
3 State common factors affecting						
the setting time of dental						
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refractories during investment e.g. water/solution-powder					JY I	
 1.4 Factors responsible for various rate of expansion in dental 						
1.5 State common factors affecting	r.					
the manipulation of carving	2					
wax e.g. temperature						
1.6 Enumerate the factors						
affecting the properties of						
crown and bridges						
1.7 Manipulate the factors in 1.6						
above to produce well-fitting		l k				
appliances (bridges and crown)		V			
appliances (bridges and crown)	2				
appliances (bridges and crown General Objective: 6.0 Understand relationship	the shaping of occ	lusion surfaces for inlays an	d crown to elimin	nate premature a	nd balancing co	ontacts in eccentric
appliances (bridges and crown General Objective: 6.0 Understand relationship Specific Learning Objectives:	the shaping of occ Teachers Activities	lusion surfaces for inlays an Learning Resources	d crown to elimin Specific Learning Objectives:	ate premature a Teachers Activities	Ind balancing co	ontacts in eccentric Evaluation
appliances (bridges and crown General Objective: 6.0 Understand relationship Specific Learning Objectives: 6.1 Define and explain the	the shaping of occ Teachers Activities Lecture	lusion surfaces for inlays an Learning Resources Textbooks, Charts and	d crown to elimin Specific Learning Objectives:	nate premature a Teachers Activities	Ind balancing co	ontacts in eccentric Evaluation Quiz
appliances (bridges and crown General Objective: 6.0 Understand relationship Specific Learning Objectives: 6.1 Define and explain the following:	the shaping of occ Teachers Activities Lecture Explain the	lusion surfaces for inlays an Learning Resources Textbooks, Charts and Forms, Reading materials.	d crown to elimin Specific Learning Objectives:	nate premature a Teachers Activities	Ind balancing conduction balan	ontacts in eccentric Evaluation Quiz Tests
appliances (bridges and crown General Objective: 6.0 Understand relationship Specific Learning Objectives: 6.1 Define and explain the following: i. Inlays (all classes) ii Crown	the shaping of occ Teachers Activities Lecture Explain the concepts covered	lusion surfaces for inlays an Learning Resources Textbooks, Charts and Forms, Reading materials.	d crown to elimin Specific Learning Objectives:	nate premature a Teachers Activities	Ind balancing co	Image: construct of the second sec
appliances (bridges and crown General Objective: 6.0 Understand relationship Specific Learning Objectives: 6.1 Define and explain the following: i. Inlays (all classes) ii. Crown iii. Premature contact	the shaping of occ Teachers Activities Lecture Explain the concepts covered	lusion surfaces for inlays an Learning Resources Textbooks, Charts and Forms, Reading materials.	d crown to elimin Specific Learning Objectives:	nate premature a Teachers Activities	Ind balancing co	entacts in eccentric Evaluation Quiz Tests Assignment
appliances (bridges and crown General Objective: 6.0 Understand relationship Specific Learning Objectives: 6.1 Define and explain the following: i. Inlays (all classes) ii. Crown iii. Premature contact iv. Balancing contact	the shaping of occ Teachers Activities Lecture Explain the concepts covered	lusion surfaces for inlays an Learning Resources Textbooks, Charts and Forms, Reading materials.	d crown to elimin Specific Learning Objectives:	nate premature a Teachers Activities	Ind balancing concepts the second sec	exaluation Quiz Tests Assignment Examination
appliances (bridges and crown General Objective: 6.0 Understand relationship Specific Learning Objectives: 6.1 Define and explain the following: i. Inlays (all classes) ii. Crown iii. Premature contact iv. Balancing contact v. Eccentric relationship	the shaping of occ Teachers Activities Lecture Explain the concepts covered	lusion surfaces for inlays an Learning Resources Textbooks, Charts and Forms, Reading materials.	d crown to elimin Specific Learning Objectives:	Teachers Activities	Ind balancing control balancin	ontacts in eccentric Evaluation Quiz Tests Assignment Examination
appliances (bridges and crown General Objective: 6.0 Understand relationship Specific Learning Objectives: 6.1 Define and explain the following: i. Inlays (all classes) ii. Crown iii. Premature contact iv. Balancing contact v. Eccentric relationship	the shaping of occ Teachers Activities Lecture Explain the concepts covered	lusion surfaces for inlays an Learning Resources Textbooks, Charts and Forms, Reading materials.	d crown to elimin Specific Learning Objectives:	Teachers Activities	Ind balancing co	entacts in eccentric Evaluation Quiz Tests Assignment Examination

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 6.2 List and explain the factors affecting the shaping of inlays and crown in relation to the following: Premature contact Balancing contact Eccentric relationship 6.3 Explain the steps taken in shaping 6.4 Shape crown and inlays to eliminate premature and balancing contacts in eccentric relationship 						
General Objective: 7.0 Know factor	ors determining sele	ction of alloy types and/or act	ryho resin in rela	tion to aesthetic	s and function	Fyaluation
Specific Learning Objectives.	Activities		Learning Objectives:	Activities	Resources	Evaluation
 5.1 Enumerate factors that determine the selection of alloys and ceramics in the construction of crown and inlays 5.2 Select the appropriate alloys and ceramics for the construction of crowns and inlays and crowns 5.3 Construct inlays and crowns 5.3 Construct inlays and crowns to alloys and ceramics to alloys and ceramices to all	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
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reflect function and aesthetics					JS S	
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PROGRAMME: HND Dental Tec	hnology	N				
COURSE TITLE: Metallurgy in D	ental Technology	Cour	se Code: DTE 313	Co	ontact Hours: 21	Hrs/Wk (30Hrs/Sem)
COURSE SPECIFICATION: Theo	retical content	<u> </u>			Practical C	ontent:
General Objective: 1.0 Know the ra	ange of metals in th	he periodic table used in der	ntistry			
Specific Learning Objectives:	Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
1.1 List all the metals used in	Lecture	Textbooks, Charts and				Quiz
melting points and densities	Explain the	naterials.				Tests
1.2 Describe the extraction from ore, important metals such	concepts cóvered					Assignment
26						
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as gold, copper, platinum						Examination
and chromium cobalt						
1.3 Define density, specific						
gravity and melting point						
1.4 State the effects of the						
factors in 1.3 above on						
metals during manipulation						
General Objective: 2.0 Understand	the science of meta	ls and alloys		C Y'		1
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
2.1 Define metal and alloy	Lecture	Textbooks, Charts and				Quiz
2.2 Demonstrate the concept	Eurolain tha	Forms, Reading materials.	C Y			Tasta
of adhesion, cohesion and	Explain the					Tests
inter-atomic forces in	concepts covered		$\mathbf{\mathbf{O}}$			Assignment
metallic crystals, changes of						Examination
stress and strain		, view (1997) (19977) (19977) (19977) (1997) (1997) (1997) (1997) (1997) (1997)				Examination
2.3 Define and explain						
primary inter-atomic bonds						
e g primary bonding forces						
and secondary bonding forces						
or Van der wal forces						
Ceneral Objective: 3.0 Understand	the factors the influ	lence choice of precious meta	ls and other type	s of metals for	dental restoratio	n n
Specific Learning Objectives:	Teachers	Learning Resources	Specific	Teachers	Learning	Evaluation
Specific Learning Objectivesi	Activities		Learning Objectives:	Activities	Resources	
3.1 Explain chemical and	Lecture	Textbooks, Charts and				Quiz
physical reactions of metals	Fynlain the	Forms, Reading materials.				Tests
used in dental technology e.g.	concepts covered					10303
galramic shock	concepts covered					
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viii. Brittleness						
ix. Hardness					\sim	
General Objective: 4.0 Understand	the technology of h	eat treatment and other manip	oulatory treatmen	ts of metal for de	ental purposes	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
1.1 Define and demonstrate	Lecture	Textbooks, Charts and				Quiz
heat treatment of metals	Explain the	Forms, Reading materials.				Tests
soaking, etc.	concepts covered		\sim			Assignment
1.2 Demonstrate and describe Tensile stress						Examination
and strain, compressive						
stress and strain, shear			$\mathbf{\hat{\mathbf{v}}}$			
wetting surface energy			-			
1.3 Use graphs to illustrate						
the following:						
i. Tensile stress and						
strain						
n. Sheer stress and						
Stram						
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PROGRAMME: HND	Dental Technology			
COURSE TITLE: Con	nplete Dental Prosthetics I			
COURSE CODE: DTE	E 314	Tutorial	Prostigale 2 Hys	Total Alles/Wir (6011es/Som)
DUKATION	Lecture:- 2 Hrs	Tutorial:-	Practical:- 2 Hrs	10tal:- 4Hrs/wk (60Hrs/Sem)
GOAL: This course is	U	s with the understanding of adva	nced principles and techniques in	volved in the production of complete dentures
GENERAL OBJECTIV	VES: On completion of the cou	arse, the student should be able to	D:	
 Understand the Understand the Understand the Understand the Understand the Understand the prosthesis 	e principles of occlusion, rete e indications for ant the limit e principles of design and mo e clinical factors that determ	ention and stability in the con- tations of immediate denture r ethods of construction for con- ine the choice of immediate re-	struction of complete denture in restorations aplete dentures estorations and the effect of ope	n classes II and III relationships erative techniques on the design of the final
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PROGRAMME: HND Dental Te	chnology				Chr.		
COURSE TITLE: Complete Der	eoretical content		Cours	e Codé: DTE 314	Co	ntact Hours: 4F	ontent:
General Objective: 1.0 Understar	nd the principles of oc	clusion, retentio	n and stabi	lity in the construc	tion of complet	e denture in cla	sses II and III relationshir
Specific Learning Objectives:	Teachers Activities	Learning Resou	urces	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 1.1 Define and explain the following: Occlusion Retention Stability Class II jaw relationship Class III jaw relationship 2 Explain teath positions in 	Lecture Explain the concepts covered	Textbooks: Ch Forms, Readin materials	arts and g				Quiz Tests Assignment Examination
1.2 Explain tooth positions in classes II and III jaw 31							

relationships

- 1.3 Explain associated skeletal structures in classes II and Ш
- 1.4 Describe the procedure for positioning teeth in classes II and III occlusal relationship
- 1.5 Demonstration the principles of articulation and balanced occlusion in both jaw relationships
- 1.6 Define and explain the following:
 - i. Curve of spee
 - ii.
 - Cohesion iii.
 - Adhesion iv.
 - Festooning v.
 - vi. Contouring
- 1.7 Explain the effect of i-iv above on the function and stability of complete dentures
- 1.8 Explain the effect of festooning and contouring on aesthetics of complete denture
- 1.9 Demonstrate the effects of 1.6 above on the construction of complete



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dentures									
General Objective: 2.0 Understand the indications for ant the limitations of immediate denture restorations									
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation			
2.1 Define and explain a	Lecture	Textbooks, Charts and				Quiz			
complete immediate denture 2.2 State indications and	Explain the	Forms, Reading materials.				Tests			
contra-indications for the	concepts covered					Assignment			
construction of complete immediate dentures						Examination			
2.3 State the advantages of			XY						
complete immediate denture									
General Objective: 3.0 Understand	the principles of de	sign and methods of construc	tion for complete	e dentures					
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation			
3.1 Prepare complete denture	Lecture	Textbooks, Charts and				Quiz			
applying the principles involved	Explain the	Forms, Reading materials.				Tests			
3.2 Identify the various types	concepts covered					Assignment			
of complete immediate						Examination			
dentures e.g. socketed and									
flanged with alveolectomy		\sim							
etc.									
5.5 State the role of									
immediate dentura									
3.4 Demonstrate the principle									

	1	1	1	1					
and techniques of									
alveoplastry on a given									
patient's model									
3.5 Construct various types of									
complete immediate denture									
General Objective: 4.0 Understand	General Objective: 4.0 Understand the clinical factors that determine the choice of immediate restorations and the effect of operative techniques on the design								
of the final prosthesis	1	1	1		-				
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning	Teachers Activities	Learning Resources	Evaluation			
	. .		Objectives:	Y					
4.1 State the clinical factors	Lecture	Textbooks, Charts and				Quiz			
or indication that	Explain the	Forms, Reading materials.				Tests			
determine the choice of	concepts covered								
immediate restorations	_					Assignment			
e.g. trauma pathology			Y			Examination			
etc.									
4.2 Explain the principles									
involved in the recording									
of Axes and gingival									
margins of teeth for									
extraction									
4.3 Remove standing teeth,									
leaving the gingival									
margin marks intact									
4.4 Explain reasons for depth									
variation of the sockets									
i.e. lebialy and palatally	×								
\checkmark									
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× ×									
Y									

PROGRAMME: HN	D Dental Technology			Y
OURSE CODE: DI	Lecture:- 1 Hr	Tutorial:-	Practical:- 2 Hrs	Total:- 3Hrs/Wk (45Hrs/Sem)
CREDIT UNITS: 2	CU	I		
OAL: This course i	designed to enable the students	acquire the techniques for the	design and construction of full and	partial dentures
ENERAL OBJECT	VES: On completion of the cou	urse, the student should be able	e to:	
Understand the Understand the Understand the Know the rear Understand the Underst	the mechanical principles of se the principles and techniques f sons for the provision of and the clinical factors which deter	emi-adjustable articulator, the or mounting casts on fully a procedures for constructing mine the use of resilient lin	he requirement for facebow and or djustable articulators using face duplicate dentures ers in complete and partial dentu	centri/eccentric occlusal records bow recordings rres

PROGRAMME: HND Dental Technology									
COURSE TITLE: Complete Dent	ure Prosthodontics I		Course	e Code: DTE 314	Co	ntact Hours: 3H	Irs/Wk (45Hrs/Sem)		
COURSE SPECIFICATION: Theoretical content						Practical Co	ontent:		
General Objective: 1.0 Understand the mechanical principles of semi-adjustable articulator, the requirement for facebow and centri/eccentric occlusal records									
Specific Learning Objectives:	Teachers Activities	Learning Resou	irces	Specific Learning Objectives	Teachers Activities	Learning Resources	Evaluation		
 1.1 Define articulators 1.2 Identify various types of articulators e.g. simple hinge articulator, semi- adjustable articulator and anatomical articulator 1.3 Describe the various components of a semi- adjustable articulators and its functions 1.4 Draw and label a semi- adjustable articulator 1.5 Explain the working principles of a semi- adjustable articulator 1.6 Mount upper and lower cast using a semi-adjustable articulator 1.7 Explain the term facebow 	Lecture Explain the concepts covered	Textbooks, Cha Forms, Reading materials.	arts and g				Quiz Tests Assignment Examination		
36 AATO									
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and its importance 1.8 Explain the indications for the use of face bow 1.9 State the requirement necessary for the recording of centric and eccentric occlusions									
General Objective: 2.0 Understand	l the principles and t	echniques for mounting ca	sts on fully adjustal	ole articulators	using facebow 1	recordings			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation			
 2.1 Describe the use of fully adjustable articulator 2.2 Identify the component parts of a fully adjustable articulator and their function 2.3 State the importance of facebow while mounting on fully adjustable articulator 2.4 Construct upper and lower record rims in preparation for clinical recordings 2.5 Mount upper and lower records rims on a full adjustable articulator taking cognizance of the vertical and 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials	S S S S S S S S S S S S S S S S S S S			Quiz Tests Assignment Examination			
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horizontal inclinations for the condylar mechanism using facebow					J'S	
General Objective: 3.0 Know the r	easons for the provi	sion of and procedures for co	nstructing dupli	cate dentures 🔨		·
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
.1 Define duplicate dentures	Lecture	Textbooks, Charts and		CX.		Quiz
.2 Enumerate indications for he duplication of dentures	Explain the	Forms, Reading materials.				Tests
.3 Explain the advantages	concepts covered					Assignment
lentures 3.4 Identify the materials						Examination
eeded for the reconstruction			Y			
.5 Describe the principles						
nd procedures for						
onstructing duplicate						
entures						
.6 Reconstruct a given		ΔV				
xisting complete upper and						
ower dentures				1.1		
eneral Objective: 4.0 Understand	the clinical factors	which determine the use of re	silient liners in	complete and par	tial dentures	T
pecific Learning Objectives:	Activities	Learning Kesources	Specific Learning Objectives:	Activities	Resources	Evaluation
1.1 Define and give	Lecture	Textbooks, Charts and				Quiz
examples of resilient \checkmark	Explain the	Forms, Reading materials.				
38	× ×					

					SY -	
liners 4.2 Enumerate the composition and ideal properties of resilient	concepts covered			DUC	Tests Assignment Examination	
 4.3 State clinical reasons for the use of resilient liners 4.4 Describe the principles of incorporation of resilient liners into an existing denture 4.5 Incorporate resilient 			Chr			
dentures						
		FOR				
	1BC					
39						
AA						

PROGRAMME: HNI	Dental Technology			
COURSE TITLE: Fu	nctional Anatomy of Mastica	tion, Swallowing and Speech		
COURSE CODE: DT	'E 316			
DURATION	Lecture:- 1 Hr	Tutorial:-	Practical:-	Total:- 1Hr/Wk (15Hrs/Sem)
CREDIT UNITS: 10	CU		I	N
GOAL: This course is	s designed to enable the student	s understand the influence of m	nuscles in the design of pros	sthesis and its retention without impairing speech and mastication
GENERAL OBJECT	VES: On completion of the co	ourse, the student should be able	e to:	
		RDFOR		
PROGRAMME: HND	Dental Technology			

COURSE TITLE: Functional Ana and Speech COURSE SPECIFICATION: The	tomy of Mastication,	, Swallowing	Course C	ode: DTE 316	Con	tact Hours: H	fr/Wk (15Hrs/Sem)
General Objective: 1.0 Understand	the role of cheek m	uscles and the su	rrounding tis	sues in the reter	ntion of prosthesis	in the oral ca	wity
Specific Learning Objectives:	Teachers Activities	Learning Resou	irces 5	Specific Learning Dhiectives:	Teachers Activities	Learning Resources	Evaluation
 1.1 Define and explain the following: 1.2 List the muscles of mastication e.g. buccinators, masseter, etc. 1.3 Explain the functions and importance of the muscles listed in 1.2 above prosthesis retention 1.4 List the muscles of facial expression e.g. Modiolus, orbicularis oris etc. 1.5 Explain the functions and importance of muscles listed in 1.4 above in prosthesis retention 1.6 Identify the muscles listed in 1.2 and 1.4 above using models, slides and chart flips 	Lecture Explain the concepts covered	Textbooks, Cha Forms, Reading materials.	arts and				Quiz Tests Assignment Examination
General Objective: 2.0 Know how Specific Learning Objectives:	speech and mastica	tion can be impro	oved urces	Specific	Teachers	Learning	Evaluation
flips General Objective: 2.0 Know how Specific Learning Objectives: 41	speech and mastica Teachers Activities	tion can be impro	oved irces	Specific Learning	Teachers Activities	Learning Resources	Evalua

 2.1 List factors considered in designing and constructing prosthesis which aid speech and mastication 2.2 Explain the effects of the 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.	Objectives:		Quiz Tests
 2.1 List factors considered in designing and constructing prosthesis which aid speech and mastication 2.2 Explain the effects of the 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.	Objectives:		Quiz Tests
 2.1 List factors considered in designing and constructing prosthesis which aid speech and mastication 2.2 Explain the effects of the 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.			Quiz Tests
				AL L	Assignment Examination
factors in 1.2 above on design and construction					
	hnology	RDFON			
DOCDAMME, UND Dontol Tool	nnology 🔰 🔻				
ROGRAMME: HND Dental Tecl	enture Repairs, Relini	ng. Rebasing and Addition			

EDIT UNITS: 2 CU AL: This course is designed to acquaint students with the principles and procedures of denture repair, refining, rebasing and addition of prosthesis NERAL OBJECTIVES: On completion of the course, the student should be able to: Understand the definitions and importance of the terms involved in repair, refining, rebasing and addition of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis	Active 2 is a restrict of the principles and procedures of denture repair, refining, rebasing and addition of prosthesis OAL: This course is designed to acquaint students with the principles and procedures of denture repair, refining, rebasing and addition of prosthesis ONERAL OBJECTIVES: On completion of the course, the student should be able to: Inderstand the definitions and importance of the terms involved in repair, refining, rebasing and addition of prosthesis Inderstand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Inderstand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Inderstand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Inderstand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Inderstand the principles of Dentute Repairs, Relining, Rebasing Course Code: DTE 317 Contact Hours: 4Hr/Wk (60Hrs/Sem)		Lecture - 2 Hrs	Tutorial.	Practical. 2 Hrs	Total AHrs/Wk (60Hrs/Som)
AL: This course is designed to acquaint students with the principles and procedures of denture repair, refining, rebasing and addition of prosthesis NERAL OBJECTIVES: On completion of the course, the student should be able to: Understand the definitions and importance of the terms involved in repair, refining, rebasing and addition of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis	DAL: This course is designed to acquaint students with the principles and procedures of denture repair, refining, rebasing and addition of prosthesis SNERAL OBJECTIVES: On completion of the course, the student should be able to:) Understand the definitions and importance of the terms involved in repair, refining, rebasing and addition of prosthesis) Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis) Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis () Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis () Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis () Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis () Understand the principles of Dental Technology () URSE TITLE: Principles of Dentate Repairs, Relining, Rebasing () Course Code: DTE 317	$\frac{1}{1}$	CU	Tutoriai		
NERAL OBJECTIVES: On completion of the course, the student should be able to: Understand the definitions and importance of the terms involved in repair, refining, rebasing and addition of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis	ENERAL OBJECTIVES: On completion of the course, the student should be able to:) Understand the definitions and importance of the terms involved in repair, refining, rebasing and addition of prosthesis) Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis) Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis) Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis (OGRAMME: HND Dental Technology Course Code: DTE 317 Contact Hours: 4Hr/Wk (60Hrs/Sem)	DAL: This course	is designed to acquaint students with	the principles and procedu	res of denture repair, refining, i	ebasing and addition of prosthesis
Understand the definitions and importance of the terms involved in repair, refining, rebasing and addition of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis	 Understand the definitions and importance of the terms involved in repair, refining, rebasing and addition of prosthesis Understand the principles and procedures employed while undertaking repairs, relining, rebasing or additions of prosthesis 	ENERAL OBJEC	FIVES: On completion of the course	e, the student should be abl	e to:	
	OGRAMME: HND Dental Technology JURSE TITLE: Principles of Denture Repairs, Relining, Rebasing Course Code: DTE 317 Contact Hours: 4Hr/Wk (60Hrs/Sem)			FOR		
1 Addition		ROGRAMME: HN OURSE TITLE: H 1d Addition	D Dental Technology Principles of Denture Repairs, Relin	ning, Rebasing Co	urse Code: DTE 317	Contact Hours: 4Hr/Wk (60Hrs/Sem)

a objective. 1.0 Know declud	ous and nermanent	dentation				ment.
c Learning Objectives:	Teachers Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
efine and explain the lowing: i. Repair i. Relining ii. Rebasing v. Addition ate the reason for each of e procedures in 1.1 above st the importance of the bocedures in 1.1 above ate the limitations of the bocedures in 1.1 above	ecture Explain the oncepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
al Objective: 2.0 Understand t c Learning Objectives:	ne morphology of th Teachers Activities	he teeth Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
xplain the principles twolved in the ollowing: i. Repairs ii. Relining ii. Rebasing tw. Addition of Prosthesis	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.	o ojecu resi			Quiz Tests Assignment Examination
 ii. Rebasing iv. Addition of Prosthesis 						





		EDUCAL
Programme: Statistics (National Diploma)	Course Code: STA 224	Total Hours: 5
Course: Biostatistics I		Theoretical: 2 hours /week
Year: 2 Semester: 4	Pre-requisite:	Practical: 3 hours /week

Goal: This course is designed to enable students apply statistics to biological data and medicine..

General Objectives: On completion of this course, the diplomate will be able to:

- 1. Understand the importance of statistics in biology and medicine.
- 2. Understand the concept of vital and health statistics.
- 3. Understand standardised rates
- .aıc. .ple gener. 4. Understand simple genetics and bioassays.

		al		Pr.	actical Cont	ent
Week	General Objective 1 (STA 224) · Underst Specific Learning Outcomes	and the importance (Resource	n hiology and a	nedicine Teache	Resource
		activities	s	Learning	r's	s
			Textbook			Textbook
			s N	Y		s Lecture
1	1.1 Explain the scope and uses of	Explain and	Lecture	Demonstrat	Explain	
	statistics in biology and medicine.	discuss the		е	and	Notes
		concepts covered	Notes	understandi	supervis	
				ng of the	е	
				concepts	student	
			Textbook			Textbook
2			S	.		s Lecture
2	1.2 State types and sources of	Explain and	Lecture	Demonstrat	Explain	
	biological and medical data such as	discuss the		e	and .	Notes
	states and National Health Services	concepts covered	Notes	understandi	supervis	
	and agricultural returns.			ng of the	e .	
			Touthook	concepts	student	Taythaal
			rextbook			rexubook
3	1 3State problems associated	Explain and	S	Demonstrat	Fxplain	s Lecture
0	with collection of biological and	discuss the	Lecture	e	and	Notes
	medical statistics	concepts covered	Notes	understandi	supervis	
				ng of the	e	
				concepts	student	
				covered by	avarcisas	Secondar





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				c Di		
7	2.3 Enumerate the uses of the indices in2.2 above	Explain and discuss the concepts covered	Textbook s Lecture Nøtes	Demonstrat e understandi ng of the concepts	Explain and supervis e student	Textbook s Lecture Notes
			Secondar	covered by	ovorcisos	Secondar
8	3.1 Define standardized rates.	Explain and discuss the	Textbook s Lecture Notes	Demonstrat e	Explain and	Textbook s Lecture Notes
	. D	concepts covered	Secondar	understandi ng of the concepts	supervis e student	Secondar
	ALBOR					
	ATU					90

9 3. in of	3.2 Distinguish between direct and		Textbook			Textbook
9 3. in of	3.2 Distinguish between direct and		s Lecture			s Lecture
	ndirect methods of standardization of rates.	Explain and discuss the concepts covered	Notes	Demonstrat e understandi	Explain and supervis	Notes
			Secondar y data	concepts covered by solving	student exercises and	Secondar y data
		RTE				
		f.				
	BOLT					
	ALBOAL					

						52
1 0	3.3 Illustrate methods in 3.2 above with examples	Explain and discuss the concepts covered	Textbook s Lecture Notes	Demonstrat e understandi	Explain and supervis	Textbook s Lecture Notes
		CT CT	Secondar Textbook	ng of the concepts	e student	Secondar Textbook
1 1	3.3 (cont.) Illustrate methods in3.2 above with examples	Explain and discuss the concepts covered	s Lecture Notes	Demonstrat e understandi ng of the	Explain and supervis e	s Lecture Notes
	General Objective 4 (STA 224): Vindersta	nd simple genetics a	Secondar	concepts	student	Secondar
	JA-BOR					
	AIOL					92

1 2	4.1 Explain the meaning of genetics.	Explain and discuss the concepts covered	Textbook s Lecture Notes Secondar	Demonstrat e understandi ng of the concepts covered by	Explain and supervis e student exercises	Textbook s Lecture Notes Secondar
			y data	solving	and	y data from
	ohh	ior r				

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				(*
				JU N		
			Textbook			Textbook
1	4.2 Define simple Mendelian ratio.	Explain and	s Lecture	Demonstrat	Explain	s Lecture
3		discuss the	Nøtes	e	and	Notes
		concepts covered		ng of the	e	
			Secondar	concepts	student	Secondar
			Textbook			Textbook
1	4.3Explain the fundamental principles of	Explain and	3 Lecture	Demonstrat	Explain	3 Lecture
4	bioassay.	discuss the concepts covered	Notes	e understandi	and supervis	Notes
				ng of the	e	
	4.4State the concepts of ED 50 and LD		Secondar	concepts	student	Secondar
			Textbook			Textbook
1	4.5Explain relative potency.	Explain and		Demonstrat	Explain	5 Leetare
5	$\sim \infty$	discuss the concepts covered	Notes	e understandi	and supervis	Notes
	4 6 Describersimely assays: direct and			ng of the	e	Secondar
	parallellines		Secondar	concepts	student	y data from
						94
	K.					



ITTLE: PHARMACOLOGY II IRSE CODE: DTS 301 IATION: Hours/Week]: Lecture: 2 Tutorial: Practical: 0 Total Consechabors: 2 (30 hrs.) DIT UNITS: 2 CU. Image: Course is designed to provide the students with the knowledge of drugs used in the management of patient with various diseases IERAL OBJECTIVES: At the end of the course, the student should be able to: Understand the concept of National Drug Policy in the context of National Health Policy Understand the Nigerian National Formulary, concept of Essential Drugs and Drug Revolving Funds. Understand the importance of patient education and counseling on the use of drugs Know types of drugs for treating conditions of various systems Know the drugs used in other health conditions.	RO	GRAMME: HNI	D DENTAL TEC	HNOLOGY				
Instant Distant IATION: [flours/Week]: Lecture: 2 Tutorial: Practical: 0 Total Contact Hours: 2 (30 hrs.) DDT UNITS: 2 CU. Lecture: 2 Tutorial: Practical: 0 Total Contact Hours: 2 (30 hrs.) L: This course is designed to provide the students with the knowledge of drugs used in the management of patient with various diseases ERAL OBJECTIVES: At the end of the course, the student should be able to: Understand the concept of National Drug Policy in the context of National Health Policy Understand the Nigerian National Formulary, concept of Essential Drugs and Drug Revolving Funds. Understand the importance of patient education and counseling on the use of drugs Know types of drugs for treating conditions of various systems Know the drugs used in other health conditions.		RSE TITLE:	PHARMACO	LOGY II				
DIT UNITS: 2 CU. L: This course is designed to provide the students with the knowledge of drugs used in the management of patient with various diseases IERAL OBJECTIVES: At the end of the course, the student should be able to: Understand the concept of National Drug Policy in the context of National Health Policy Understand the Nigerian National Formulary, concept of Essential Drugs and Drug Revolving Funds. Understand the importance of patient education and counseling on the use of drugs Know types of drugs for treating conditions of various systems Know the drugs used in other health conditions.	JR	ATION: (Hours/	<u>U15 301</u> Week):	Lecture: 2	Tutorial:	Practical: 0	Total Contact	Hours: 2 (30 hrs.)
L: This course is designed to provide the students with the knowledge of drugs used in the management of patient with various diseases ERAL OBJECTIVES: At the end of the course, the student should be able to: Understand the concept of National Drug Policy in the context of National Health Policy Understand the Nigerian National Formulary, concept of Essential Drugs and Drug Revolving Funds. Understand the importance of patient education and counseling on the use of drugs Know types of drugs for treating conditions of various systems Know the drugs used in other health conditions.	E	DIT UNITS: 2 CU	•					
Understand the concept of National Drug Policy in the context of National Health Policy Understand the Nigerian National Formulary, concept of Essential Drugs and Drug Revolving Funds. Understand the importance of patient education and counseling on the use of drugs Know types of drugs for treating conditions of various systems Know the drugs used in other health conditions.	• A]	L: This course with variou	is designed to j <u>is diseases</u> /ES: At the ei	provide the studer	nts with the kn	owledge of drugs	used in the man	agement of patient
Understand the Nigerian National Formulary, concept of Essential Drugs and Drug Revolving Funds. Understand the importance of patient education and counseling on the use of drugs Know types of drugs for treating conditions of various systems Know the drugs used in other health conditions.		Understand th	e concept of Nati	ional Drug Policy in	the context of l	National Health Po	licy.	
Understand the importance of patient education and counseling on the use of drugs Know types of drugs for treating conditions of various systems Know the drugs used in other health conditions.		Understand th	e Nigerian Natior	nal Formulary, cond	cept of Essential	Drugs and Drug I	Revolving Funds.	
Know types of drugs for treating conditions of various systems Know the drugs used in other health conditions.	•	Understand th	e importance of J	patient education a	nd counseling o	n the use of drugs		
Know the drugs used in other health conditions.		Know types of	drugs for treating	g conditions of vari	ous systems			
AL BORDE		Know the drug	s used in other h	nealth conditions.				
				BOWE	FU'			

PROGRAMME: COURSE TITLE	HND DENTAL TECHN PHARMACOLOGY II	OLOGY	Course Code	: DTS 301	Total	Contact Hou	ars. 30 hours
COURSE SPECI	FICATION: Theory				<u> </u>		
GENERAL OBJE Specific Learnin Objectives (Theory)	CTIVE 1.0: Understand ag Teacher's Activities	the concept of Resources	f National Drug Specific Learnin Objecti (Practic	g Policy in the second	he conto her's vities	ext of Nation Resources	al Health Policy Evaluation
 1.1 Explain the National Drug Policy in the context of National Health Policy. 1.2 Describe th concept of Essential Drugs: historical background advantages and limitations. 1.3 Explain the roles of the nurse in th implementation of essential drug programme 	e • Lecture • Discussion • Brainstorming	 Sample of National He Policy (NHP &National I Policy (NDP documents Sample of Essential Di list Drug prescription papers Multimedia projectors/1 p Skides/CDs 	alth Drug rugs apto			<u>,</u>	 Assignment Test Questionnaire Quiz Examination
14							96





Drug Revolving Fund scheme management.							
General Objective 3.03 Specific Learning Objectives (Theory)	Teacher's Activities	Resources	Specific Learning Objectives (Practical)	Teacher's Activities	Resources)	erugs Eval	uation
 3.1 Explain the concept of Pharmacovigilance 3.2 Define selfmedication. 3.3 Explain self - medication, compliance and non-compliance 	 Lecture Discussion Brain storming Counseling 	 samples of drugs Adverse drug reaction charts 	RTH			Assig Test Ques Quiz Exar	gnment stionnaire nination
and associated dangers. 3.4 Explain the importance of patient education and counseling on the use of drugs.	R	JARD,					
General Objective 4.03 Specific Learning Objectives (Theory)	: Know the types Teacher's Activities	of drugs for treat Resources	Specific Learning Objectives (Practical)	of various syste Teacher's Activities	ems Resou	irces	Evaluation



4.5 Prescribe and administer						
General Objective 5.0:	Know the drugs use	d in management o	of other health	conditions.		
Specific Learning Objectives (Theory)	Teacher's Activities	Resources	Specific Learning Objectives (Practical)	Teacher's Activities	Resources	Evaluation
 5.1 Identify drugs such as: anti- parasitic, antibacterial, antifungal,cytotoxi c, anti-histamines, psychogenic, vitamins, and minerals etc. 5.2 Describe each drug group listed in 5.1 above 5.3 Identify types and compositions of infusions 	 Lecture Discussion Guide students to identify types and compositions infusions Demonstrate setting of intravenous line 	 Drug samples Laboratory Textbooks Audio-visual aids Sample of drips(infusion s) Drip stand, screen Drip setting tray 				 Assignment Test Questionnaire Quiz Examination
GRAMME: HND Dental Te RSE TITLE: Polymer Cher	chnology nistry					
ATION Lect	ure:- NHr	Tutorial:-	Practica	l:- 2 Hrs	Total:- 3Hrs/	Wk (45Hrs/Sem)
DIT UNITS: 2 CU			Tucheu			
L: This course is designed to	provide the students with t	the basic knowledge of C	Chemistry of Polyr	ners		

GENERAL OBJECTIVES: On c	completion of the cou	rse, the student should be able	to:			
 1.0 Understand the basic pri 2.0 Understand the Chemist 3.0 Understand the techniqu 	inciples of polymer ry of Polymer Synt ie for the commerci	science hesis al production of polymers				
PROGRAMME: HND Dental Tec	chnology					
COURSE TITLE: Polymer Cher	nistry	Cou	rse Code: PLT 211	Co	ontact Hours: 3H	Irs/Wk (45Hrs/Sem)
COURSE SPECIFICATION: The	eoretical content				Practical Co	ontent:
General Objective: 1.0 Understan Specific Learning Objectives:	Teachers Activities	Les of polymer science	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 1.1 Define Polymers 1.2 Classify Polymers 1.3 List the general properties of Polymers 1.4 Describe the physical and molecular structure of polymers 	Lecture Explain the concepts covere	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
porymers						<u> </u>

					_	
1.5 Carryout the following						
simple test to identify a						
polymer						
1.6 Explain average molar mass						\sim
and molar mass distribution						2
1.7 Determine average molar						
mass of polymer by the						
following methods:						
viscometer, osmometer,						
boiling point elevation and						
end group analysis						
1.8 Explain the importance of						
molar mass distribution in			~			
for a porticular application						
1.0 Exploin the terms: Class						
1.9 Explain the terms. Glass						
and melting temperature						
1 10 L ist the factors affecting Tg			$\mathbf{\nabla}$			
and Tm						
1 11 Measure the To of						
Polymers by volume						
expansion coefficient						
General Objective: 2.0 Understand	the Chemistry of P	olymer Synthesis				
Specific Learning Objectives:	Teachers	Learning Resources	Specific	Teachers	Learning	Evaluation
	Activities		Learning	Activities	Resources	
			Objectives:			
2.1 Define polymerization,	Lecture	Textbooks, Charts and				Quiz
functionality and degree of	Explain the	Forms, Reading materials.				Tosts
polymerization	concents covered	\bigcup				Tests
2.2 Classify polymerization	concepts covered					Assignment
process						Examination
2.3 Outline the mechanism of						Examination
chain polymerization (free						
radical)						
2.4 Outline the mechanism of	\succ					
	р		1	1	1	
\sim						10:
						TO

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step-growth polymerization 2.5 Compare chain polymerization and step- growth polymerization 2.6 Define copolymerization 2.7 Classify copolymers into:							
copolymers							
General Objective: 3.0 Understand	I the technique for th	e commercial production of	polymers				
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation	
 3.1 Identify and describe the different techniques of producing polymers commercially 3.2 Outline the process of bulk polymerization 3.3 List the advantages and disadvantage of bulk polymerization 3.4 Outline the process of suspension polymerization 3.5 List the advantages and disadvantages of suspension polymerization 3.6 Outline the process of solution polymerization 3.7 List the advantages and disadvantages of solution polymerization 3.8 Outline the process of emulsion polymerization 3.9 List the advantages and disadvantages of solution 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination	
	p						104

disadvantages of en polymerization 3.10 Prepare different polymers using the	nulsion			
techniques listed ir above	n 3.1			
		APDTO		
PROGRAMME: HND Der COURSE TITLE: Primar	ntal Technology v Oral Health Care	Q'		
COURSE CODE: DTH 31	13			
DURATION	Lecture:- I.Hr	Tutorial:-	Practical:- 1 Hr	Total:- 2Hrs/Wk (30Hrs/Sem)
CREDIT UNITS: 2 CU				
GOAL: This course is desi	gned to provide the studen	ts with the knowledge of the con	mmon oral diseases and their manage	ement in accordance with the Primary Oral Health
JA A				10!

Care standing orders						
GENERAL OBJECTIVES: On a	ompletion of the cour	se, the student should b	be able to:			
1.0 Know healthy oral tissue2.0 Know the general preve3.0 Know the epidemiology	es, diagnosis and aet ntive and control me of dental diseases in	iology of common or easures of common de n a community	ral diseases ental diseases			
				Y		
PROGRAMME: HND Dental To	chnology			Y		
PROGRAMME: HND Dental To COURSE TITLE: Primary Ora	chnology Health Care		Course Code: DTH 313	• Co	ontact Hours: 2H	Irs/Wk (30Hrs/Sem)
PROGRAMME: HND Dental To COURSE TITLE: Primary Ora COURSE SPECIFICATION: Th	chnology Health Care eoretical content		Course Code: DTH 313	• Co	ontact Hours: 2H Practical Co	Irs/Wk (30Hrs/Sem) ontent:
PROGRAMME: HND Dental To COURSE TITLE: Primary Ora COURSE SPECIFICATION: Th General Objective: 1.0 Know he Specific Learning Objectives:	chnology Health Care eoretical content althy oral tissues, dia Teachers Activities	agnosis and aetiology	Course Code: DTH 313 y of common oral diseases res Specific Learning Objectives:	Teachers Activities	ontact Hours: 2H Practical Co Learning Resources	Irs/Wk (30Hrs/Sem) ontent: Evaluation

						107
dental caries 1.4 Identify the features of inflamed gingivae 1.5 Describe the composition of dental plague and calculus 1.6 Identify dental plague, calculus and caries in the oral cavity 1.7 Examine school children, personnel and other members of a community for oral diseases 1.8 Identify and diagnose common oral diseases as stated in the primary oral health care standing orders 1.9 Treat oral health problem identified in 1.8 above 1.10 Refer patients to the next management level for						
further management if necessary	reneral preventive a	nd control measures of comm	on dental disease	20		
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 2.1 Enumerate the various preventive and control measures of common dental diseases 2.2 Explain the preventive and control measures in 2.1 above 2.3 Design an oral health education programme for the prevention and control of oral 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
AAL						10.

dental diseases in a community						
General Objective: 3.0 Know the e Specific Learning Objectives:	epidemiology of dem Teachers Activities	tal diseases in a community Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 3.1 Define epidemiology 3.2 Define the common terminologies used in epidemiology e.g. incidence, prevalence, endemic, epidemic, pandemic, etc. 3.3 Explain the epidemiological factors responsible for the prevention of: 3.4 Gather epidemiological data from a community 3.5 Diagnose and treat identified dental diseases in 3.3 above in a rural community 3.6 Design an oral education programme for the prevention of the disease in 3.4 above in a rural community 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
Department	Programme: Na	tional Course Co	de:		Credit Hours	: 4

Diploma		
Subject/Course: IntroductoryMicrobiology		Theoretical: 1 hours/week
	DDS 111	
Year:Semester:	Pre-requisite:	Practical: 3 hours /week
eral Obiectives		
.Understand the history and scope of	of microbiology	
(now the microscope examination o	f micro-organisms	
Understand systematic microbiology		
Understand growth of micro-organis	sms	
Know the isolation, cultivation and p	preservation of different micro-org	ganisms
Know the various methods of contro	ol of micro-organisms	
80	*	
A		

	National Diploma		Course C	ode: DDS 11	1	Credi	Hours: 4		
	Microbiology				CP)	Theor	retical: 1	hours/week	
	rear:Semester:	ear:Semester:				Pract		nours / week	
	Theoretica	nt			Pra	Practical Content			
	General Objective 1.0: Understand the History and Scope of Microbiology.								
We ek	Specific Learning Outcomes	Teach activi	ier's 🔨	Resource	Specifi Learnir	ic ng	Teacher's	Resources	
/s			S-		Outcom	ies	activities		
	1.1 Outline the scope of microbiology	Refer to	students	Classro	Examine a drop of		Assist students	Microscopes:	
1	1.2 List the early scientists	releva	nt texts	om and	pond wate	er I	to make:-	and	
-	involved in the	and as	ses	library	under the	9	smears	compou	
	development of the	their v	vork		light and		hanging	nd	
	microbiology	up.			compound		arops, whole	Microsc	
	The obloid gy.				and identi	fv i	mounts.	opes	
		Give			micro-		staining etc		
2		assign	ment.		organisms	;			
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	 1.3 Describe the role of the scientists in 1.2 above. 1.4 Explain the role of microbiology in medicine, agricultural, industry etc. 			Continue with the experiment above	DUCA	
	General Objective 2.0: Know the	e microscope exam	nination of r	nicro-organism:	5.	
3	 2.1 Explain the principle of microscopy. 2.2 Identify and describe all types of microscope e.g. light microscope, compound microscope, dark field, microscope, phase contrast microscope, electro-microscope. 	Lecture Give assignment		Identify and distinguish micro- organism By using staining techniques	Assist students to make:- whole mounts, staining etc	Microscopes: Microsco pes Chemicals and stains
	 2.3 Explain the application of each type of microscope in 2.2 above in the study of microbiology. 2.4 List and describe the various microbial staining techniques e.g., spore 			Differentiate between Prokaryotes and Eukaryotes.	Illustrat e the various diagnost ic method to identify the	microscopic slides, culture loops and laboratories reagents
					1 -	11:




	3.4 above				e.coli, etc)	JCA	
					CALT		
	General Objective 4.0: Understa	nd the grow	th of micro	o-organ	isms.		
	Growth of Micro-organism						
7	4.1 Explain the nutritional requirements of	lecture	Cla	ssroom	Prepare, sterilise and		Autoclave Refrigerato
,	micro-organisms			Jurces	preserve		Kemgerato
	4.2 Explain the sources of				microbial		
	nutrient for various				growth		
8	groups of micro-	\mathbf{N}			cultures.		Raw
	organisms.						source of
					Pour and		carbohyd
	4.3 Explain the break down and				preserve		rate
	use of food molecules by				growth on		
	micro-organisms.				petri dishes		
	4.4 Describe the microbial				and on agar		
	growth curve.				Sidfits.		

	General Objective 5.0: Know the	isolation, cult	ivation and pres	servation of diffe	rent micro-or	ganiśms I
9-11	List the main types of culture media used for different groups of micro-organisms.	lecture	Classroom resources	Prepare pure culture from a mixed	Involve students in the	Amino vitamir Autocla
	Describe the composition of each of the media in 5.1 above.			Culture	n of culture media and sub-	Anaero
	List other materials that can be added to		CH		micro-	
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	ALLBORN	Dron				

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OURSE TITLE: Partial	Dental Prosthetics			
OURSE CODE: DTE 32	1			
RATION	Lecture:- 1 Hr	Tutorial:-	Practical:- 3 Hrs	(Total:- 4Hrs/Wk (60Hrs/Sem)
EDIT UNITS: 2 CU				
AL: This course is desi	gned to acquaint students w	ith the knowledge of tooth-bo	orne partial denture design, cor	struction and applications
ERAL OBJECTIVES	: On completion of the cou	rse, the student should be abl	e to:	
Understand the pr Understand the pr Understand the pr	inciples of tooth-borne pa inciples of "lost wax" pro inciples of dental applica inciples and process of so	artial denture design and co ocess in metal casting and i tion of metal melting and f oldering dental alloys	onstruction its dental applications inishing systems	×
Understand the pr Understand the pr Understand the pr	inciples of tooth-borne pa inciples of "lost wax" pro inciples of dental applica inciples and process of so	artial denture design and co ocess in metal casting and i tion of metal melting and f oldering dental alloys	onstruction its dental applications inishing systems	· · ·
OGRAMME: HND Den	inciples of tooth-borne pa inciples of "lost wax" pro inciples of dental applica inciples and process of so tal Technology	artial denture design and co ocess in metal casting and i tion of metal melting and f oldering dental alloys	onstruction its dental applications inishing systems	

	Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Define and explain tooth- borne partial dentures Explain the importance and function of tooth-borne partial dentures List the various classes of tooth-borne partial dentures e.g. Kennedy and Beckett's classifications Describe the component parts of tooth-borne partial dentures and their functions Explain the advantages and limitation of tooth-borne partial denture Describe the principles of tooth-borne partial denture Describe the constituents and properties of the materials of the component parts of tooth-borne partial dentures Demonstrate the designs of tooth-borne partial dentures Demonstrate the designs of tooth-borne partial dentures on given models using the principles described in 1.6 above (Demonstration should cover various classes) Describe the process of the construction of various classes of tooth-borne partial dentures	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.	R			Quiz Tests Assignment Examination

10 Construct various classes of tooth-borne partial						
General Objective: 2.0 Understand	the principles of "lo	ost wax" process in metal cas	ting and its dent	al applications		
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Évaluation
2.1 Define the term "Lost Wax" process	Lecture Explain the	Textbooks, Charts and Forms, Reading materials.				Quiz Tests
2.2 Explain the importance of 'Lost Wax" process in metal	concepts covered					Assignment
2.3 List the various types of waxes used in metal casting process				AT		Examination
2.4 Describe the composition and properties of the metal casting process						
2.5 List the various types of nvestment materials used in metal casting process		o Dit				
2.6 Describe the composition and properties of investment materials used in metal casting process		20AIC				
2.7 Describe the principles of 'Lost Wax'' process in metal casting	AAL					
2.8 Prepare WAC pattern of	N^Y					

ooth-borne partial dentures 9 Prepare molds of WAX attern of tooth-borne partial						CA
entures in preparation for letal casting 10 Cast metal for tooth-						
orne partial dentures						
eneral Objective: 3.0 Understand	the principles of de	ntal application of metal mel	ting and finishir	ng systems		Evoluotion
becilic Learning Objectives:	Activities	Learning Kesources	Specific Learning Objectives:	Activities	Resources	
1 Define or explain the	Lecture	Textbooks, Charts and				Quiz
llowing terms:	Evaluin the	Forms, Reading materials.		× ×		Tests
Wow Dottom	Explain the					1 ests
i. wax rattern	concepts covered					Assignment
i. Sprucing			```			
v. Burnout Temperature						Examination
v. Burnout Time						
vi. Wax-pattern coating			1			
ii. Metal melting						
ii. Casting						
x. Finishing in relation						
to metal works						
2 Deceribe the mineral of						
etal melting in relation to						
ental technology practice		$\mathbf{\mathbf{v}}$				
6, Francisco						
3 Melt metal for the						
oduction of partial dental						
alatal plata						

3.4 Carry out the finishing process of the produced partial denture skeletal plate						CAT
n 3.3 above.		C 11 1 1 / 1 11				
General Objective: 4.0 Understand	Teachers Activities	Learning Resources	oys Specific Learning Obiectives:	Teachers Activities	Learning Resources	Evaluation
4.1 Define and explain the following terms:	Lecture	Textbooks, Charts and Forms, Reading materials.				Quiz
4.2 Describe the mechanism of "joining" in soldering	concepts covered					Assignment
4.3 List the types, composition and properties of luxes			R.			Examination
4.4 Describe various methods of soldering			₹ Í			
4.5 Describe various methods of heating						
4.7 List the types, composition and properties of solders		OAR				
4.8 Identify the major hand ools and equipment used in coldering	A	\mathbf{S}				
4.9 Describe the functions of he various parts of the	5,					



Know the musculature, Know the principles of Understand the selectio	anatomical features screw, spring and m n or removable orth	and bone growth reg nyofunctional appliar odontic appliances a	gions ass aces nd types	ociated with myofu	inctional applia	ince therapy	JUA
DGRAMME: HND Dental To URSE TITLE: Orthodontic '	echnology Technology I neoretical content		Cours	e Code: DTE 322	Co	ntact Hours: 4H	Irs/Wk (60Hrs/Sem)
eral Objective: 1.0 Understa	nd the history and e	ssentials of orthodon	ties	<u> </u>			Jitent.
ific Learning Objectives:	Teachers Activities	Learning Resource	res y	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Define Orthodontics Narrate the relevance of orthodontic treatment in contemporary dental practice Outline the history of Orthodontics List the goals of Orthodontic treatment	Lecture Explain the concepts covere	Textbooks, Chart Forms, Reading materials.	ts and				Quiz Tests Assignment Examination

mal-occlusion							
to Orthodontics							
1 Explain the effects of							
pressure from Orthodontics							
appliances e.g. Orthodontics appliance					F		
2 Describe the aetiology of							
bones in relation to oral							
appliances e.g. Orthodontics				$\mathbf{\lambda}$			
appliances 2 Define Orthodontic model							
4 State the significance of							
models in Orthodontic							
treatment							
5 Describe Orthodontics			2				
model making in its			¥				
trimming)				
6 Produce and trim							
Orthodontics models							
eneral Objective: 2.0 Know the n	nusculature, anatom	ical features and bone growth	regions associat	ed with myofund	ctional applian	ce therapy	
pecific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation	
1 Define myofunctional	Lecture	Textbooks, Charts and				Quiz	
opliances	Explain the	Forms, Reading materials.				Tests	
.2 List myofunctional	concepts covered	*				Assistant	
ppliance and their uses						Assignment	
.3 List the muscles of						Examination	
nastication							
.4 List the muscles of facial	Y I						
•							

5 Identify the muscles of astication and facial expressions in relation to ayofunctional appliances 6 Describe the aetiology of one growth in relation to ayofunctional appliances in the following areas:					E	JCA
 i. The maxilla (palate) ii. The mandibles 7 Describe the principles ad procedures for the onstruction of yofunctional appliances 8 Construct myofunctional opliances 				AN		
eneral Objective: 3.0 Know the p	principles of screw,	spring and myofunctional a	appliances			
ecific Learning Objectives:	Teachers	Learning Resources	Specific	Teachers	Learning	Evaluation
<u> </u>	Activities		Learning Objectives:	Activities	Resources	
1 Define screw and spring	Activities Lecture	Textbooks, Charts and	Learning Objectives:	Activities	Resources	Quiz
Define screw and spring relationship to orthodontic	Activities Lecture Explain the	Textbooks, Charts and Forms, Reading material	Learning Objectives:	Activities	Resources	Quiz Tests
Define screw and spring relationship to orthodontic pliances List various types of	Activities Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading material	Learning Objectives:	Activities	Resources	Quiz Tests Assignment
1 Define screw and spring relationship to orthodontic pliances 2 List various types of rews	Activities Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading material	Learning Objectives:	Activities	Resources	Quiz Tests Assignment Examination
1 Define screw and spring relationship to orthodontic opliances 2 List various types of rews 3 List the various types of orings 4 Identify various screws ad spring in orthodontic eatment 5 Explain reason why	Activities Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading material	Learning Objectives:	Activities	Resources	Quiz Tests Assignment Examination
 Define screw and spring relationship to orthodontic pliances List various types of rews List the various types of rings Identify various screws d spring in orthodontic eatment Explain reason why pansion screws are used in 	Activities Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading material	Learning Objectives:	Activities	Resources	Quiz Tests Assignment Examination
 1 Define screw and spring relationship to orthodontic pliances 2 List various types of rews 3 List the various types of rings 4 Identify various screws d spring in orthodontic eatment 5 Explain reason why pansion screws are used in thodontic treatment 	Activities Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading material	Learning Objectives:	Activities	Resources	Quiz Tests Assignment Examination

expansion screw appliances 3.7 Identify various spring neorporated appliances in the reatment of orthodontic patients 3.8 Compare and contrast the effects of screw and spring appliances in orthodontics 3.9 Describe the principles and procedures of constructing spring and screw appliances 3.10 Construct various types of screw expansion appliances 3.11 Construct removable						
pring appliance						
Seneral Objective: 4.0 Understand	the selection or rem	novable orthodontic appliance	s and types of an	chorage used in	orthodontics	
pecific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
4.1 Define anchorage in	Lecture	Textbooks, Charts and				Quiz
relation to orthodontics	Explain the	Forms, Reading materials.				Tests
4.2 Identify various types of	concepts covered					
anchorage e.g. simples,						Assignment
reciprocal, re-enforced,						Examination
Intermaxinary, etc 1.3 Explain the effects of						
anchorage on orthodontic		6				
appliances						
4.4 Describe the principles of						
anchorage in the	$\gamma \chi \gamma$					
anchorage in the construction of						

4.5 Demonstrate anchorage		
4.6 Construct five different		
appliances exhibiting		
anchorage		
4.7 List the requirement for		
anchorage		
.8 Examine various		
determine treatment		
1.0. Select models to		
determine orthodontic		
treatment		
ucument		
Programme: SCIENCE LABORATORY TECHNOLOGY: MICROBIOLO	DGY	
Course: BACTERIOLOGY	Course Code: STM 311	Contact Hours: 2 – 0 - 3
Week General Objectives: 1.0 Understand bacterial structure		
Special Learning Objective	leachers Activities	Resources
PDF	2,	
BOR		
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		07
ANATOMY AND MORPHOLOGY OF BACTERIA		,
	Lecture	es
• Describe with examples the principal gross forms of eubacteria as revealed by light microscopy e.g. cocci, bacilli, cocco-bacilli etc.	Give assignment	5
	Question and answer technique	
• Describe the chemical composition of the bacterial cell wall.		
Describe bacterial cytoplasmic ultrastructures.	2 do	
Explain the form and structures of bacterial flagella, pilli and		
ohentok		
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		129

General Objectives: 2.0 Kno Special Learning Objective CLASSFICATION OF BACTER	ow the principles of bacterial nomen	clature and taxonomy Teachers Activities	Resources
 Explain bacterial class, or strain. 	order, family, genius, species and	Lectures Assignments Questions and answer techniques	Blackboard Projectors Taxonomic charts
 Explain the anatomical criteria in the develo bacteriology. 	and physiological properties used pment of the determinative key	as 3 do – in	
• Draw a chart of bacterial t	axonomy based on 2.2 above.	4 do –	
	BOAL		

k	General Objectives: 3.0 Know the methods of identification of bac Special Learning Objective	teria Teachers Activities	Resources
	IDENTIFICATION OF BACTERIA	Lectures	Microscope
	 Explain the following staining terminologies: mordant, accentuators, vital staining. 	Practical Assignment Questions and answer techniques	Glass ware Slides Incubators
	Differentiate between acid, basic and neutral staining.	Grade log books (practical notebooks)	Weighing balances Water baths Hot plates
	• Explain the formulation of stains important in the identification of bacteria.		Magnetic stirrers
	• Explain the principles of the reactions of the stains in 3.3 above.	Students to prepare different reagents used for 3.1	

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enance of bacterial cultures
Resources
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BACTERIA CULTURES AND GROWTH CHARACTERISTICS		
	Lectures	
4.2 Explain factors which influence bacterial growth under laborator conditions e.g. pH, temperature, moisture, nutrient requirement	Y Give assignment	Glass ware
etc.	Question and answer techniques Laboratory demonstration activities	Autoclave Hot air oven
4.3 Draw and explain the bacterial growth curve		Water bath pH meter
		Thermometer s Refrigerator
4.4 Explain types of culture media, e.g. enriched media, differentimedia etc.		Inoculating loops Anaerobic jar
4.5 Identify examples of various bacteriological media in 4.3 above		U-V lamps
4.6 Explain the preparation and storage of various bacteriologic media.	^{al} Carry out the inoculation of different bacterial media in tube	
4.7 Inoculate bacteria on media incluster tube and bottle		
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			CATOR
Week	General Objectives: Special Learning Objective	Teachers Activities	Resources
	 Describe medium preparation and the cultivation of micro aerophilic bacteria e.g Neissaria spp. 	Prepare media for special purposes. Carry out isolation of Neisseria spp.	
	 Prepare media for special purposes e.g. transport media, media for growth of spirochaetes, leptospira and mycoplasma. 		
	Describe the various methods for the separation of mixed cultures.	Prepare and store stock culture	
	AAL		
	JATE		134

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		CAT
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Week General Objectives: 5.0 Know major bacterial taxonomic groups		Bacauraac
	- Teachers Activities	Resources
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Week	k General Objectives: 6.0 Know the principles and methods of controlling bacterial number in the environment.					
	Special Learning Objective	Teachers Activities	Resources			
	R	Lectures	Autoclave			
	6.5 Explain sterilization and disinfection by physical methods.	Questions and answer	Refrigerators			
		technique Laboratory	Bunsen burner			
			Hot air			
	6.6 Explain sterilization and disinfections by chemical methods.		Glass ware			
13-14			Inoculating loops			
		Practical sterilization and disinfection	Knives, scalpels			
Week	Special Learning Objective	Teachers Activities	Resources			
	22					

WARDWAL BOARD FOR TECHNICAL EDUCATION

1-2	II. Prepare slides and observe and draw various bacteria	7 Supervise students prepare stain	7 Slides of bacteria culture.
	forms under the microscope.	view and draw.	8 Microscope Glass ware
5-6	III. Carry out the biochemical tests in 3.5 above e.g. sugar fermentation reactions, methy1 red, MRUP etc.	8 Supervise students to carry out biochemical identification of different	Incubators
7-9	$\ensuremath{\mathrm{IV}}\xspace$. Inoculate bacteria on media in plate, tube and bottle.	Gram positive and Gram-negative bacteria e.g. sugar fermentation methyl red, MRUP etc.	Weighing balances Water baths
	V. Prepare various media for isolation and identification of specific bacteria e.g. mannitol salt agar for staphylococcusaureus etc.	Carry, out the inoculation of different bacterial media in tube plates and bottle.	Hot plates Magnetic stirrers
	VI. Isolate and identify the organism in 4.6 above.	Prepare different microbiological media for different uses.	Autoclave Hot air oven Water bath pH meter Thermometers Refrigerator
		Isolate common bacteria. Carry tests	Inoculating loops Anaerobic jar
	VII. Cultivate anaeropic batteria using anaerobic jar.	to identify common bacteria.	U-V lamps
	7 Prepare media for special purposes e.g. transport media, media for growth of spirochaetes, leptospira	Carry out cultivation of anaerobic bacteria.	

DDOCDANIME, HND	DENTAL TECHNOLOGY			
PROGRAMME: HND	DENIAL IECHNOLOGY			
COURSE TITLE: OCC	LUSSION AND ITS DYSFUN	NCTION		
COURSE CODE: DTE	2 323 (Merged with 411)			
DURATION	Lecture:- 2 hrs	Tutorial:- hrs	Practical:- hours	Total:- 30 hrs
CREDIT UNITS: 2		-		
GOAL: This course is d	esigned to acquaint the student	with knowledge of the int	tricacies of balanced pc	clusion and its effects on the efficiency of dental
prostheses and health of the	he patient. ES: On completion of the cour	se the student should be	able to:	
1.0 Know the terms used	in describing occlused relations	shine		
1.0 Know the terms used	in describing occlusar relations	siips		
2.0 Understand the proce	esses of obtaining balanced occl	usion from completed der	ntal prostneses	
3.0 Know factors govern	ing establishment of balanced of	occlusion		
4.0 Know the effects of c	occlusal irregularities on the hea	alth of the patient	$\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{\mathbf{$	
DDOC DAMME JUND D	RENTARSPECHNOLOCY	Stor		
PROGRAMME:HND D	DENTAL RECHNOLOGY			
COURSE TITLE: DTE	323	Course Co	de: DTE 323	Contact Hours:hrs
NATH	5	25		

COURSE SPECIFICATI	ON: Theoretical conte	ent		Pra	ctical Content:	
<u>General Objective 1.0: Kr</u> Specific Learning Objectives:	now the terms used in d Teachers Activities	escribing occlusal Learning Resources	relationships Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 Occlusal relationship 1.1 Explain the meaning of the following terms: Centric occlusion Balanced occlusion Balanced occlusion Freeway space (FWS) iv. Rest vertical dimension (RVD) v. Rest Position (RP) vi. Intercuspal position (IP) vii. Occlusal vertical dimension (OVD) viii. Occlusal vertical dimension 1.2 Describe the relationship between the terms in 1.1. above 1.3 Explain with the aid of articulated full/full dentures the	AL BO	RDF	J. Chi			

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phenomena in 1.1					\sim	
above	derstand the processes	of obtaining balan	and acclusion from comple	tad dantal prosthasas		
Specific Learning	Teachers Activities	I earning	Specific Learning	Teachers Activities	Learning	Evaluation
Objectives:	Teachers mentiones	Resources	Objectives:	reachers reavines	Resources	Lyanuation
Balanced occlusion						
 2.1 Identify areas of irregularities on the occlusal surfaces of dentures 2.2 Ascertain intensity of pre-mature contact with the use of articulation papers 2.3 Explain spot-grinding 			TECH			
process to obtain balanced occlusion 2.4 Explain the relationship between the condylar angle and balanced occlusion		ADF	<u> </u>			
General Objective 3.0: Ki	now factors governing e	stablishment of ba	lanced occlusion			
Specific Learning Objectives:	Teachers Activities	Learning	Specific Learning	Teachers Activities	Learning	Evaluation
Establishment of balanced occlusion	1AY				Resources	
AAT) >		27			





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COURSE TITLE: COMPLETE DENTURE PROSTHETICS III COURSE CODE: DTE 411 (merge with 317) Relining, repairs etc DURATION Lecture: - 2 hrs Tutorial:- Hours Practical:- 3 hours NOtal:- 75 hrs CREDIT UNITS: 3 GOAL:: This course is designed to give the student a broad knowledge of finishing processes in construction and duplication of complete dentures GENERAL OBJECTIVES: On completion of the course, the student should be able to: 1.0 Understand the principles of occlusion, retention and stability in the construction of contract denture in classes II and III relationships 1.0 Understand the trimming of cleaned denture to anatomical outlines 3.0 Know how to festoon and stipple appropriate areas of the denture and place back on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for box grinding COURSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs	PROGRAMME: H	ND DENTAL TECHNOLOGY			
COURSE CODE: DTE 411 (merge with 317) Relining, repairs etc DURATION Lecture: 2 hrs Tutorial: Hours Practical: 3 hours Jotal: 75 hrs COURSE CODE: DTE 411 (merge with 317) Relining, repairs etc DURATION Lecture: 2 hrs Tutorial: Hours Practical: 3 hours Jotal: 75 hrs GOAL: This course is designed to give the student a broad knowledge of finishing processes in construction and duplication of complete dentures GENERAL OBJECTIVES: On completion of the course, the student should be able to: 1.0 Understand the principles of occlusion, retention and stability in the construction of compute denture in classes II and III relationships 1.0 Understand the trimming of cleaned denture to anatomical outlines 3.0 Know how to festoon and stipple appropriate areas of the denture and place back on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for the grinding Course Code: DTE 411 Contact Hours: 75 hrs VIRSE TITLE: COMPLETE DESTURE PROSTHETICS Quese Code: DTE 411 Contact Hours: 75 hrs	COURSE TITLE: 0	COMPLETE DENTURE PROSTH	ETICS III		
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GOAL: This course is designed to give the student a broad knowledge of finishing processes in construction and duplication of complete dentures GENERAL OBJECTIVES: On completion of the course, the student should be able to: 1.0 Understand the principles of occlusion, retention and stability in the construction of complete denture in classes II and III relationships 1.0 Understand the principles of occlusion, retention and stability in the construction of complete denture in classes II and III relationships 1.0 Understand the trimming of cleaned denture to anatomical outlines 3.0 Know how to festoon and stipple appropriate areas of the denture and place back on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for the grinding Course Code: DTE 411 Contact Hours: 75 hrs	CREDIT UNITS: 3				V
GENERAL OBJECTIVES: On completion of the course, the student should be able to: 1.0 Understand the principles of occlusion, retention and stability in the construction of controle denture in classes II and III relationships 1.0 Know how to deflask the denture from the mould 2.0 Understand the trimming of cleaned denture to anatomical outlines 3.0 Know how to festoon and stipple appropriate areas of the denture and place brack on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for not grinding ROGRAMME:HND DENTAL TEXHNOLOGY URSE TITLE: COMPLETE PENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs	GOAL: This course	is designed to give the student a broad	ad knowledge of finishin	g processes in construction a	nd duplication of complete dentures
1.0 Understand the principles of occlusion, retention and stability in the construction of compute defiture in classes II and III relationships 1.0 Know how to deflask the denture from the mould 2.0 Understand the trimming of cleaned denture to anatomical outlines 3.0 Know how to festoon and stipple appropriate areas of the denture and place back on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for spot grinding VOGRAMME:HND DENTAL TECHNOLOGY VURSE TITLE: COMPLETE DEPTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs	GENERAL OBJEC	TIVES: On completion of the course	e, the student should be a	ible to:	
1.0 Know how to deflask the denture from the mould 2.0 Understand the trimming of cleaned denture to anatomical outlines 3.0 Know how to festoon and stipple appropriate areas of the denture and place back on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for spot grinding OGRAMME: HND DENTAL TECHNOLOGY URSE TITLE: COMPLETE DESTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs	1.0 Understand	he principles of occlusion, retention a	and stability in the constr	uction of complete denture in	classes II and III relationships
2.0 Understand the trimming of cleaned denture to anatomical outlines 3.0 Know how to festoon and stipple appropriate areas of the denture and place back on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for socierinding ROGRAMME:HND DENTAL TECHNOLOGY URSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs	1.0 Know how to de	flask the denture from the mould			
3.0 Know how to festoon and stipple appropriate areas of the denture and place back on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for spot erinding COURSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs	2.0 Understand the f	rimming of cleaned denture to anator	nical outlines		
3.0 Know how to festoon and stipple appropriate areas of the denture and place back on the articulator 4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for spot grinding COURDENT AL TECHNOLOGY VURSE TITLE: COMPLETE DENTIVE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs 20	2.0 Onderstand the	initially of cleaned dentate to anatom		ĊXY	
4.0 Understand the polishing of dentures using polishing materials 5.0 Understand the use of squash bits or articulation paper marks for spot arinding COURSE TITLE: COMPLETE DENTURE PROSTHETICS COURSE Code: DTE 411 Contact Hours: 75 hrs 20	3.0 Know how to fe	stoon and stipple appropriate areas of	the denture and place ba	ck on the articulator	
5.0 Understand the use of squash bits or articulation paper marks for spot arinding SOURCE Source Code: DTE 411 Contact Hours: 75 hrs	4.0 Understand the i	onlishing of dentures using polishing	materials		
5.0 Understand the use of squash bits or articulation paper marks for spot grinding	1.0 Onderstand the	is a contained as a sing poinsing i			
ROGRAMME:HND DENTAL TECHNOLOGY DURSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs	5.0 Understand the	se of squash bits or articulation paper	r marks for spot grinding		
ROGRAMME:HND DENTAL TECHNOLOGY DURSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs					
ROGRAMME:HND DENTAL TECHNOLOGY DURSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs					
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ROGRAMME:HND DENTAL TECHNOLOGY DURSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs					
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ROGRAMME:HND DENTAL TECHNOLOGY DURSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs					
DURSE TITLE: COMPLETE DENTURE PROSTHETICS Course Code: DTE 411 Contact Hours: 75 hrs		BOr			
	ROGRAMME:HND	DENTAL TECHNOLOGY			
	ROGRAMME:HND DURSE TITLE: CO	DENTAL TECHNOLOGY	ICS Course Code:	DTE 411 Contact H	ours: 75 hrs
	ROGRAMME:HND DURSE TITLE: CO	DENTAL TECHNOLOGY MPLETE DENTURE PROSTHET	ICS Course Code:	DTE 411 Contact H	ours: 75 hrs
	ROGRAMME:HND)URSE TITLE: CO	DENTAL TECHNOLOGY MPLETE DENTURE PROSTHET	ICS Course Code:	DTE 411 Contact H	ours: 75 hrs
	ROGRAMME:HND DURSE TITLE: CO	DENTAL TECHNOLOGY MPLETE DENTURE PROSTHET	ICS Course Code:	DTE 411 Contact H	ours: 75 hrs
	ROGRAMME:HND DURSE TITLE: CO	DENTAL TECHNOLOGY MPLETE DENTURE PROSTHET	TCS Course Code: 30	DTE 411 Contact H	ours: 75 hrs

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COURSE SPECIFICATION	: Theoretical content		I	Practical Content: 3 hrs		
General Objective 1.0: Know	how to deflask the den	ture from the mould				
Specific Learning	Teachers Activities	Learning	Specific Learning	Teachers Activities	Learning	Evaluation
Objectives:		Resources	Objectives:		Resources	
Deflasking of denture			•			
1.1 Explain the stages of flask separation by the use of rubber mallet and plaster knife			~	CALL		
1.2 Remove denture from model using turbine chisel, plaster shears and saw			CECHT			
1.3 Immerse deflasked dentures in ultrasonic cleaners to remove plaster particles from the fitting surface		¢0				
General Objective 2.0: Unde	erstand the trimming of o	cleaned denture to anato	omical outlines			
Specific Learning	Teachers Activities	Learning	Specific Learning	Teachers Activities	Learning	Evaluation
Objectives:		Resources	Objectives:		Resources	
2.1 Identify muscle attachment on the dentures	BO					
2.2 Explain the purposes of relief of muscled attachment	Abr					
SAT) *		31			

2.3 Carry out relief purposes using trimming stone and steel burs					SCR	
2.4 Finish abrasion with emery cloth and sandpaper mounted on mandrels						
General Objective 3.0: Know	how to testoon and stip	ple appropriate areas	of the denture and place	back on the articulator	Loomina	Evolution
Specific Learning Objectives:	leachers Activities	Learning	Specific Learning Objectives:	reachers Activities	Learning	Evaluation
Festooning and stippling		Resources	objectives.		Resources	
 3.1 Explain the purposed of festooning and stippling 3.2 Identify the areas for festooning and stippling dentures 3.3 Festoon and stipple denture 3.4 Place back the denture on the articulator to check occlusion and 		RDFO				
articulation	rstand the polishing of	lentures using polishi	a materials			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Polishing of Denture						
AAT			32			<u> </u>


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5.3 Identify the use of 5.1 and 5.2 above					
5.4 Mount assembled dentures in articulator					
5.5 Sport-grind the occlusal surface of the denture using bull technique			CAL		
			All'		
PROGRAMME: HND DE	NTAL TECHNOLOGY				
COURSE CODE: DTE 412					
DURATION	Lecture:- 2	Tutorial:- hours	Practical:- 2 hours	Total:- 60 hrs	
CREDIT UNITS: 3	<u> </u>				
GOAL: This course is desig	gned to provide the stude	nts with an advance knowledge	in orthodontic technology		
GENERAL OBJECTIVES	: On completion of the c	ourse, the student should be abl	e to:		
1.0 Understand the principle	s of design of removable	Orthodontic appliances			
2.0 Know different types of	basic removable Orthodo	ontic appliance			
3.0 Understand the procedur	re for correcting the irreg	ularities in the dental arch			
4.0 Know the effect of force	s on teeth and their suppo	orting tissues			
)r				
AAL		34			

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5.0 Know the components an	d materials used in Orth	odontic applianc	ces			C V	
6.0 Know the construction of	Orthodontic appliances	3				5	
PROGRAMME:HND DEN	TAL TECHNOLOGY						
COURSE TITLE: ORTHO	DONTIC TECHNOLO	DGY II	Cou	rse Code: DTE 412	Contact Hours: 60	nrs	
COURSE SPECIFICATION	N: Theoretical content				Rractical Content: 2 hrs		
General Objective 1.0: Unde	erstand the principles of	design of remov	able (Orthodontic appliances	,		
Specific Learning Objectives:	Teachers Activities	Learning Resources		Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 Removable Orthodontic appliances 1.1 Define the following terms Retention and Anchorage In relation to orthodontic technology 1.2 Explain the principles of retention and anchorage in relation to Orthodontic appliances 1.3 Identify the teeth and tissues to be used for anchorage and retention	AL BO	RDF.	5				
AATA				35			

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1.4 Identify the areas to be covered by the					SCH	
appliances						
General Objective 2.0: Know	v different types of basi	c removable Orthodor	tic appliance		T	E
Specific Learning	Teachers Activities	Learning	Specific Learning	Teacners Activities	Learning	Evaluation
Removable Orthodontic		Kesources	Objectives.		Kesources	
Appliances						
 2.1 Define the following appliances i. Myfo-functional ii. Acvtivators 			CH			
2.2 Identify the uses of each group in 2.1 above						
General Objective 3.0: Unde	rstand the procedure for	correcting the irrega	harities in the dental arcl	1		
Specific Learning	Teachers Activities	Learning	Specific Learning	Teachers Activities	Learning	Evaluation
Objectives:		Resources	Objectives:		Resources	
Indications for use		DI				
3.1 Identify tht e different	20					
irregularities of the dental arch	ALL					
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3.2 Choose the correct appliance to regularise the irregularities identified in 3.1 above					SCA	
	1 00 0.0					
General Objective 4.0: Know Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives	Teachers Activities	Learning Resources	Evaluation
Effect of forces on teeth 4.1 Explain the tooth movement in relation to orthodontic appliances		DFO				
4.2 Observe the effect of tooth and supporting movement on the underling tissue (e.g deposition, resubsion	VAL BO					
AAT) /		37			

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and facial profile					\sim	
improvement).						
4.3 Assess the					\mathbf{N}	
success/failure of						
1.2 shows				\sim		
4.2 above General Objective 5.0: Know	v the components and m	 naterials used in Ortho	odontic appliances			
Specific Learning	Teachers Activities	Learning	Specific Learning	Teachers Activities	Learning	Evaluation
Objectives:		Resources	Objectives:		Resources	
Components and materials						
 5.1 Identify the components and materials used in Orthodontic appliances 5.2 Use each of the 		FO				
components						
and materials listed in 5.1 above for appropriate cases of dental mal-formation	80					
General Objective 6.0: Kno	w the construction of O	rthodontic appliances	Specific Learning	Teachers Activities	Learning	Fyaluation
Objectives:	Teachers Activities	Resources	Objectives:	Teachers Activities	Degeumeeg	Evaluation
AATIC			38	<u> </u>	ACSULL CES	





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PROGRAMME: HNI	D DENTAL TECHNOLOGY					
COURSE TITLE: ME	TALLIC PROSPTHODONTIC	C DENTURES I		~		
COURSE CODE: DTH	E 413)	
DURATION	Lecture:- 2	Tutorial:- hours	Practical:- 4	hrs Tota	l:- 90 hrs	
CREDIT UNITS: 4			·			
GOAL: This course is	designed to provide the student w	vith a knowledge of the use	e of metallic alloys	for construction of den	tal prosthetics	
GENERAL OBJECTI	VES: On completion of the course	se, the student should be ab	ole to:			
1.0 Know the materials	for construction of metallic dent	ures				
2.0 Understand the pro-	perties of materials for construction	on of metallic dentures				
	· · · · · · · · · · · · · · · · · · ·					
3.0 Know how to cast 1	mpressions and prepare models for	or surveying				
4.0 Know how to surve	ey, design and duplicate model					
PROGRAMME:HND	DENTALSTECHNOLOGY					
COURSE TITLE: ME	LALDIC PROSPTHODONTIC	Course Code	2: DIE 413	Contact: 90 hrs		
AAT		41				

DENTURES I	N. Theoretical	4		Dreatical Contacts 41		
COURSE SPECIFICATION	N: Theoretical content		1 /	Practical Content: 4 hrs		
General Objective 1.0: Knov Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Alloys/Materials for construction				CAL		
lloys used in metallic prosthodontics e.g. gold						
.2 Identify non-precious alloys used in the construction of metallic prosthodontics e.g. cobalt, chromium (CO/CK), swaged stainless steel, etc.			RTE			
.3 Describe the suitability of each type of materials/alloys mentioned in 1.1. and 1.2 above respectively		ARD'				
.4 Determine the technique to use with each of the materials/alloys described in 1.3 above.	SALB					

WARDWAL BOARD FOR TECHNICAL EDUCATION

pecific Learning Dbjectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Properties of materials for onstruction						
1 Explain the following rms i. Corrosion resistance ii. Tarnishing iii Malleability iv. Ductility v. Thermal conductivity vi. Dimensional changes			CECTI-			
2 Describe the anipulation of the materials in 1.1. above in relation to metallic denture construction in terms of: i. Heat treatment ii. Hardening heat treatment iii. Annealing iv. Work hardening	20	RDF	3			
3 Explain the effect of the treatment in 2.2. above on the alloys	ALY					

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2.4 Know how to cast impression and prepare models for surveying				
			ALTI	
		TECT		
		Or		
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General Objective 3.0: Kno	ow how to cast impressi	ons and prepare n	nodels for surveying			$\mathcal{O}_{\mathcal{F}}$
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning	Evaluation
Casting of impression and preparation of models					Resources	
3.1 Cast impression using stone plaster				CH.		
3.2 Dry out the models						
3.3 Trim model to appropriate size and shapes						
General Objective 4.0: Kno	ow how to survey, desig	gn and duplicate m	odel			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Objectives:	Teachers Activities	Learning Resources	Evaluation
Surveying						
4.1 Determine the tilt of the model on the surveyor table		Dr				
4.2 Establish correct path of insertion and removal						
4.3 Fix appropriate surveyor accessories to	N B					
determine department of undercut and inscribe the survey line.	7r					
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DURATION	Lecture:- 1hr	Tutorial:-	Hours Practica	l:- hr T	otal:- 15 hrs	
CREDIT UNITS: 1						
GOAL: This course is a	designed to give the stude	nt in depth knowledge	of the ceramics used in	the dentistry and its app	lication to crown	
GENERAL OBJECTIV	ES: On completion of th	e course, the student s	should be able to:			
1.0 Understand history,	production, types and use	s of dental ceramics in	dentistry			
2.0 Understand the proc	esses involved in ceramic	s crown fabrication				
2.0 Onderstand the proc		s crown raoncation	X	\mathbf{v}		
			-			
PROGRAMME:HND	DENTAL TECHNOLO	GY				
COURSE TITLE: SC	ENCE OF DENTAL MA	ATERIALS Cou	urse Code; DTE 414	Contact Hours: 15	hrs	
(Ceramics) III						
COURSE SPECIFICA	TION: Theoretical cont	ent		Practical Content:		
	Understand history, prod	uction and used of der	tal ceramics in dental to	echnology	T	F 4 *
General Objective 1.0:	T		Specific Learning	1 eachers Activities	Learning	Evaluation
General Objective 1.0: Specific Learning Objectives:	Teachers Activities	Learning Resources	Objectives:		Decourses	
General Objective 1.0: Specific Learning Objectives:	Teachers Activities	Learning Resources	Objectives:		Resources	
General Objective 1.0: Specific Learning Objectives: History of Dental ceramics	Teachers Activities	Learning Resources	Objectives:		Resources	
General Objective 1.0: Specific Learning Objectives: History of Dental ceramics	Teachers Activities	Learning Resources	Objectives:		Resources	
General Objective 1.0: Specific Learning Objectives: History of Dental ceramics 1.1 Define dental	Teachers Activities	Learning Resources	Objectives:		Resources	
General Objective 1.0: Specific Learning Objectives: History of Dental ceramics 1.1 Define dental ceramics	Teachers Activities	Learning Resources	Objectives:		Resources	
General Objective 1.0: Specific Learning Objectives: History of Dental ceramics 1.1 Define dental ceramics 1.2 Identify types of	Teachers Activities	Learning Resources	Objectives:		Resources	
General Objective 1.0: Specific Learning Objectives: History of Dental ceramics 1.1 Define dental ceramics 1.2 Identify types of ceramics used in	Teachers Activities	Learning Resources	Objectives:		Resources	
General Objective 1.0: Specific Learning Objectives: History of Dental ceramics 1.1 Define dental ceramics 1.2 Identify types of ceramics used in dentistry e.g. L crystalline	Teachers Activities	Learning Resources	Objectives:		Resources	



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b. pressables						
3.0 General Objective 2	2.0: Understand the proce	esses involved in cer	amics crown fabrication			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
3.1 sciences of bonding porcelain to metal3.2 chemical processes involved porcelain baking						
General Objective 3.0:						
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
General Objective 4.0:) *			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
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COURSE TITLE: PROFESSIONAL ETHICS AND JUR COURSE CODE: DTE 415 DURATION Lecture:- T CREDIT UNITS: GOAL: This course is designed to GENERAL OBJECTIVES: On completion of the course,	RISPRUDENCE utorial:- Hours	Practical:- hours	Total:- 15 hrs	
COURSE CODE: DTE 415 DURATION Lecture:- T CREDIT UNITS: GOAL: This course is designed to GENERAL OBJECTIVES: On completion of the course,	utorial:- Hours	Practical:- hours	Total:- 15 hrs	
DURATION Lecture:- T CREDIT UNITS:	utorial:- Hours	Practical:- hours	Total:- 15 hrs	
CREDIT UNITS: GOAL: This course is designed to GENERAL OBJECTIVES: On completion of the course,		•		
GOAL: This course is designed to GENERAL OBJECTIVES: On completion of the course,				
GENERAL OBJECTIVES: On completion of the course,			>	
	the student should be ab	le to:		
1.0 Know the role of Dental Technologist Registration Boa	rd in the practice of den	tal technology professio	n.	
2.0 Know the activities of Associates of Dental Technologis	st of Nigeria.			
3.0 Understand the relationship between technologist and pa	atient.			
4.0 Understand the inter-professional relationships in dentis	try.			
5.0 Understand procedures of setting up general dental labo	ratory practice.			
5.0 Understand the skill, mal-practice and general outlook of	of health care law in Nig	eria.		
	X			
PROGRAMME:HND DENTAL TECHNOLOGY				
COURSE TITLE: PROFESSIONAL ETHICS AND	Course Code: D	DTE 415 Contact	Hours: 15 hrs	

General Objective 1.0: know the role of dental Technologist Registration board in the practice of dental technology profession. Learning Objectives: Learning Resources Specific Learning Objectives: Teachers Activities Learning Resources Evaluation 1.1 Explain the DTRB Decree 43 of 1987 Image: Comparison of the DTRB Decree 43 of 1987	COURSE SPECIFICAT	TON: Theoretical con	tent		Practical Content:		
Specific Learning Objectives: Teachers Activities Learning Resources Specific Learning Objectives: Teachers Activities Learning Resources 1.1 Explain the DTRB Decree 43 of 1987 Decree 43 of 1987 1.2 Explain the decree in 1.1 above. Image: Comparison of the professional qualifications required before entering practices. Image: Comparison of the professional qualifications Image: Comparison of the professional qualificational qualificational q comparison	General Objective 1.0:	know the role of denta	l Technologist Reg	istration board in the pr	ractice of dental technol	ogy profession.	
1.1 Explain the DTRB Decree 43 of 1987 1.2 Explain the decree in 1.1 above. 1.3 Explain the right of the Board to regulate professional qualifications required before entering practices. 1.4 Describe how the Board carries out the functions in 1.2 above.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 1.2 Explain the decree in 1.1 above. 1.3 Explain the right of the Board to regulate professional qualifications required before entering practices. 1.4 Describe how the Board carries out the functions in 1.2 above. 	1.1 Explain the DTRB Decree 43 of 1987						
 .3 Explain the right of the Board to regulate professional qualifications required before entering practices. .4 Describe how the Board carries out the functions in 1.2 above. 	.2 Explain the decree in 1.1 above.						
.4 Describe how the Board carries out the functions in 1.2 above.	.3 Explain the right of the Board to regulate professional qualifications required before entering practices.			TECH			
	.4 Describe how the Board carries out the functions in 1.2 above.		DEC				
5 State the committees of the board and the functions of various committees.	5 State the committees of the board and the functions of various committees.	20					

General Objective 2.0: Know the	e activities of Ass	ociation of Denta	l Technologist of Nigeria.			
Specific Learning Objectives:	Teachers	Learning	Specific Learning	Teachers	Learning	Evaluation
	Activities	Resources	Objectives:	Activities	Resources	
Activities of Association of						
Dental Technologist of Nigeria						
2.1 Explain the history of the						
Association of Dental						
Technologist of Nigeria.						
2.2 Explain the differences)		
between activities of the						
Board and the Association.						
2.3 Explain the duties of the						
Association to the members						
of the profession.						
2.4 Explain the responsibilities of						
members of the Association.						
General Objective 3.0: Understa	nd the relationsh	ip between techn	ologist and patient.			
Specific Learning Objectives:	Teachers	Learning Y	Specific Learning	Teachers	Learning	Evaluation
	Activities	Resources	Objectives:	Activities	Resources	
Relationshin between						
Technologist and natients						
reemologist and patients		L'				
3.1 Explain the responsibility of						
dental technologist to welfare						
of patients and their relatives.						
I						
3.2 Explain why its is unethical to						
enter into any arrangement	Y					
whereby patients are directed						
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to your practice.					\sim	
 3.3 Explain that a dental technologist has a right to accede to the request of a patient, in so far that patient is not being treated by another technologist. 3.4 Explain the implications of using patients from one laboratory to another. 3.5 Describe the gravity of condemning, in presence of your patients, the work of 				ALED		
your colleagues.						
General Objective 4.0: Understa	nd the inter-profe	essional relations	ships in dentistry		-	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Inter-professional relationship in dentistry 4.1 Explain the relationship of the dental technology profession with: a. Dentist b. Dental therapist c. General medical practitioner d. Ophthalmologist s e. Dietitian	A-BO	RDF				
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4.2 Explain why in the course of referral from 4.1 above nothing should be done to disturb the confidence of patients.						
General Objective 5.0: Understand Specific Learning Objectives:	nd procedures of Teachers Activities	setting up gener Learning Resources	al dental laboratory prac Specific Learning Objectives:	ctice. Teachers Activities	Learning Resources	Evaluation
 Setting up of General dental laboratory practice 5.1 Describe problems associated with setting up a new dental laboratory practices 5.2 Explain the need for involving solicitors when setting up new practice with associates or partners. 5.3 List advantages and disadvantages of setting up new dental laboratory close to an existing one. 5.4 Explain your right as a citizen to take part in press, television and radio on professional matters, without going fould of ethical laws. 	- BO	RDF	Rech			
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Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Health care law in Nigeria						
6.1 Define 'skill' and malpractice in the profession of dental technology						
6.2 Describe infamous or disgraceful conduct in dental technology progressional aspect						
6.3 List offences which may fall in 6.1 above			TE T			
6.4 Explain the legal aspect of health care law as related to pitfalls in practices of dental technology.			58- ¹			
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GY/PROJECT WRITING			
tura. 1			
cture: - 1	Tutorial: -	Practical: - 2	Total: (45)hrs
udents with the knowled	ge of research skills, bei	ng inquisitive and discretional i	n presenting research outcome in a
he course, the student sh	ould be able to:	N .	
volved research work.			
o research work.			
	2°		
4			
dation of hypothesis.	>		
·k.			
hniques.			
V~			
collection.			
	tudents with the knowled the course, the student sh volved research work. o research work. dation of hypothesis. rk.	tudents with the knowledge of research skills, bei the course, the student should be able to: volved research work. o research work.	tudents with the knowledge of research skills, being inquisitive and discretional i the course, the student should be able to: volved research work. o research work. dation of hypothesis. rk. chniques.

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11.0 Know how to report a research findings							
COURSE SPECIFICATION: Theoretical C	ontent	Course S	pecification: Pr	actical Content			
General Objective 1.0: Know the types, process s	teps in and char	acteristics	of research.	,			
Specific Learning Objective	Teachers Activ	vities	Learning Resources	Specific Learning Objective	Teachers Activities	Learning Resources	Evaluation
 1.1 Define research methodology 1.2 Explain types of research work 1.3 Discuss the problems of research work e.g. conceptualization, generalization etc. 1.4 Discuss steps in research process. 1.5 Explain the characteristics of research methodology 1.6 Identify ethical considerations in Research work 	Explains resear types and prob ii. Explain the characteristics research work steps. iii. Explains eth considerations research work	rch, its olems. of a and its	Textbooks, whiteboards , marker, laptop, overhead projectors, journals, writing materials.	 1.1 Prepares a research work for the students to handle each of the stages. Analyze research problems and how to resolve it 	Taking students on a field trip to some industries and research institutes	Logistics for the field trip. Organizing and arrangement for field trips Scientific materials/ equipment, protective materials such overall, rubber boots, nose mask, goggle, hand gloves, head gear etc.	Assignment, writing reports on different research work. Test
General Objective 2.0: Understand scientific app	roach to researc	h			l	l	
2.1 Discuss the methods of science in research.	Explain the me	ethods,	Internet and Relevant	Demonstrates scientific research and ways of	Field trip to scientific programmes to	Scientific materials/	Assignment, test, quiz
AAT			60				

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2.2 State the aims of science in research	aims and functions of	websites, textbooks.	achieving a good research work	understand the	equipment	
2.3 Explain the functions of science in research.	science in research	whiteboards , marker,		involved.	and protecting	
2.4 Compare science and common sense in research	ii. Explain the	laptop, overhead	,		materials	
	differences between	projectors, journals,				
	science and common	writing materials.				
	sense					
		Ó				
General Objective 3.0: Know how to design a res	search work					
3.1 Explain research design.	Explain the meaning,	Textbooks, whiteboards	Demonstrates design criteria and	Showing examples of	Previous research	Write a research
3.2Discuss the purposes of research design.	purpose and principles	, marker, laptop.	process of writing a research	research design	works, iournals.	proposal, indicating a
3.3 Explain the principles of research design.	of research design.	overhead	proposal	research	books,	specific
3.4 Identify design criteria.	ii. Explain design	journals,		proposal	S	design,
3.5 Describe the process of writing a research proposal	chiteria:	materials.				test
	iii. Guide students to					
	write research proposals					
	Give assignment					
AAI		61	·	·		<u>.</u>

General Objective 4.0: Understand research pr	oblem				<u>y</u>	
4.1 Define research problems.	Explain research problem.	Textbooks, whiteboards	Analyzing sample problems and	Show various examples of	Previous research	Students prepares a
4.2 Identify sampling problems.	ii. Describe sample	, marker,	formulating	research	works,	sample from
4.3 Formulate research questions.		overhead	questions	the ways of	books,	population
4.4 Identify the steps in the evaluation of a	problems.	projectors,		correcting it	presentation s	using a
research problem.	iii. Describe the	writing			5	sampling
4.5 State the features of a researchable	Tormulation	materials.				teeninque
problem.	of research questions. iv. Explain the steps in					
4.6 Critique sample research problem.	the		*			
	evaluation of research					
	problem.	Ĺ				
	v. Explain researchable					
	problem and its					
	features					
General Objective 5.0: Understand formulation	n and validation of hypothes	sis				
5.1 Define hypothesis.	Explain hypothesis and	Textbooks,	Provision of	Formulating	Previous	Students
5.2 Define validation	its characteristics.	whiteboards	previous research	specific or	research	creates a
S.z Denne valuation.	ii. Explain validation	laptop,	comparing the	hypothesis	journals,	general
5.3 Explain specific and general hypothesis.	and its problem in	overhead	hypotheses to	analyzing the	books,	hypothesis
	research work.	projectors,	identify specific	null and	presentation	in a relation
		journals,	and general	alternate		to a

					10	×
5.4 Relate hypothesis to statement of problem.5.5 Explains the difference between null and alternate hypothesis.5.6 Discuss the problems of validation in research	 iii. Distinguish among specific, general null and alternate hypothesis. iv. Describe the relationship between hypothesis and statement of problem. 	writing materials.	among them. Deducing null and alternative hypothesis in previous presented research work	hypothesis. Creating statements of problems and validating the research work	8	particular statement/p roject
General Objective 6.0: Understand variables in re	esearch work	I		1	I	
 6.1 Define variables in research work 6.2 Explain types of variables. 6.3 Discuss consideration for choice of variables. 6.4 State control problems of variables 6.5 Explain the relevance of variables to research work 	Explain variables, their types and relevance. ii. Explain consideration in the choice of variables. iii. Explain control problems of variables	Textbooks - Journals	Showing the use of variables in other prepared research works and its peculiar characteristics	Showing types of variables in previous work and how to choose a particular variables for different research work	Previous research project/work , assignments, journals and presentation s	Student chooses a variables in a specific research assignment
General Objective 7.0: Understand sample and s	ampling techniques	l	•	1	I	<u> </u>
 7.1 Explain the following: Population Population Sample Population Representation 	Explain population, sample and representation. ii. Describe types of sampling methods.	Books, journals, internet, chalk board, writing materials	To demonstrate a community as a population and creating a sample and representation	Field trip to the chosen community and showing the process of arriving at a	Logistics to the community, books, journals, presentation	Assignment , test, group work, quiz
 Types of sampling methods 	iii. Explain need for		from the population	sample or representation from that	s, materials for	
		63				

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7.2 Discuss the need for samples	sample within a population			community	references	
General Objective 8.0: Understand how to revi	ew literature		4	×		
8.1 State the relevance of literature review in research work.8.2 Outline the sources of literature	Explain the relevance of literature review in research.	Textbooks, whiteboards , marker, lantop	Presentation of previous books, newspaper, presentation and	Field trip to library and other archives areas to see	Logistics, journals, books, internet	Give assignment, test, group work
0.2 Outline the sources of interature.	ii. Explain the sources	overhead	journals to show	various	archives,	WORK
8.3 Explain organization and referencing of literature	of literature iii. Describes the organization and	projectors, journals writing materials.	its literature and	literature and their sources	presentation s	
	referencing of literature.					
General Objective 9: Know the tools and techni	iques for data collection					
9.1 Define research instrument.	Explain the following	Textbooks, whiteboards	Identifying research	Presenting previous	Books, journals,	Group work, assignment,
9.2 Discuss types of research	research	, marker, laptop,	instruments, presents its	research work to show the	research work,	test and quiz
instruments	instruments:	overhead projectors,	characteristics and problems	instrument used ,	presentation	
9.3 Enumerate characteristics of research instruments.	1. Questionnaire	journals, writing	associated with	characteristics		
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9.4 State the problems associated with various	2. Observation	materials.	the instruments	and problems		
research instruments	3. Interview			N		
	4. Ratings, etc.					
	ii. Describe pitfalls of each instrument in above.		CA			
General Objective 10.0: Understand data analysi	s techniques			I		
10.1 Define data analysis.	Explain data analysis, its	Textbooks, whiteboards	Identifying data analysis, tools and	Presenting previous	Books, journals,	Group work, assignment,
10.2 Discuss the tools for data		, marker	its presentation in	research work	research	test and
Analysis: qualitative and quantitative.	tools and limitations	overhead	previous work	to show its analysis and tools used	work, presentation	quiz
10.3 Explain limitations in each of		journals,				
10.2 above		materials.				
General Objective 11.0: Know how to report rese	earch findings	1		I	I	
11.1Define research report writing	Explain research report	Textbooks,	Discussion on a	Presentation of	Books,	Writing of a
11.2 Identify the contents of research report writing.	and its contents. il. Conduct test Guidance for students	whiteboards , marker, laptop, overhead	written research work to the process and steps involved and	the previous work to show the process of report writing	journals, research work, presentation	complete accurate research work Group
Introduction	using examples of good	projectors,	understanding the	and steps	P	work,
Literature review	reports.	journals, writing	importance of presenting	involved. Producing		assignment, test and
Methodology	Reference to exercises	materials.	accurate research	accurate		quiz
		65	1	1	1	



COURSE: ENTREP	RENEURSHIP EDUCATION			
CODE: EED 413				
DURATION (Hours/Week)	Tutorial: 0	Practical: - 2	Total: 4 (60hrs/semester)	
UNITS: 2				
GOAL: This cou	rse is designed to enable the st	udent to acquire knowled	ge and skills, competencies, understandings	
and to b	e innovative, creative and succ	essfully manage personal,	community, business and work	
opportu	nities.		<u> </u>	
GENERAL OBJECTIVES:	On completion of this course,	the student should be abl	e to:	
1 Know the history and govern	ment efforts in promoting entr	epreneurship developmen	t in Nigeria	
2 Understand the role of perso	onal savings and portfolio invest	ment in National Economi	c Development	
3 Understand various life skills	needed by an entrepreneur			
4 Understand the various sour	ces of information for entrepre	eneurship development		
5 Know the roles of commercia	al and development banks in sn	all scale industrial develop	oment.	
6 Know the functions of variou	is support agencies in small and	medium scale industrial d	levelopment.	
7 Understand the activities of	different industrial associations	in relation to entrepreneu	ırship.	
8 Know the functional areas of business				
9 Understand the need for bus	siness planning.			
10 Understand the strategies fo	r consolidation and expansion (of a business enterprise		
11 Understand the need for ma	nagement and business success	ion plan		
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PRO	DGRAMME: HIGHE	ER NATIONAL DIPLON	1A IN DENTAL	TECHNOLOGY				
	COURSE: Entrep	oreneurship Educatio	n	Course Code: EED 41	.3 Cor	tact Hours: (60	
	COURSE	Theoretical Content:	2	Practical Content:	2			
SPI	ECIFICATION:							
	General 1: Und	lerstand the history and	d government e	efforts in promoting entrep	reneurship development	t in Nigeria		
	Objective:	Tarahan Astivitian		Current in Language	To a skawa A shirini a s		E	
5	opecific Learning	leachers Activities	Learning	Specific Learning	leachers Activities	Learning	Evaluation	
1 1	Dofine an	L Introduce the	Toythooks	Ubjectives	Quidoctudants to	Resources	Quiz	
1.1	Enterprise	1. Introduce the	TEXLOOOKS	identity reatures	research into	Use of	Quiz	
12	Identify different	terms: Enternrise	Classroom	of the types of	different forms of	relevant	Tost	
1.2	forms of	Entrepreneur	resources	enterprises identified	enternrises	video clins	Test	
	Enterprises	Entrepreneurship	resources	enterprises identified.		The compo	Assignment	
1.3	Classify the						Assignment	
_	different forms of							
	enterprises into:			Identify entrepreneurial	Invite a successful	Guest		
	private vs. public	II. Explain the		traits, characteristics	entrepreneur to give	speakers		
	Profit vs. non-	historical		and qualities.	a talk on traits for	from		
	profit Formal vs.	development and			successful	successful		
	informal	role of			entrepreneurship.	businesses		
	Individual vs.	entrepreneurship in)				
	community Local	enterprise creation		Identify successful				
	vs. foreign	in Nigeria.		entrepreneurs in				
	Business vs.			Nigeria.				
	social Small vs.							
	large				Guide students to			
	Manufacturing	III. Compare and 🖌			search the web on			
	vs. service	Contrast, using a			comparative study of			
	consumer vs.	relevant film,			entrepreneurship.			
1 /	Narrate the	entrepreneurship in						
1.4	history of	Nigeria with other						
	entrepreneurshin	countries of the		Write a brief				
	development in	woria.		comparison of				
				entrepreneurship in				
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	Nigeria.			Niger	ia with either			
1.5	Compare the			Japar	n or Korea			
	success and							
	impact of	IV. List support					\mathbf{P}	
	entrepreneurship	agencies for SME's						
	in Nigeria with	in						
	of the world:	Nigoria NEDC IDCa						
	lapan, India.	BOL NACEDE etc						
	China, Malaysia.	BOI, NACIOB ELC						
	South Korea, etc.	V. Explain						
		government policy						
		on financing SME's						
		_						
	General 2: Und	erstand the role of per	sonal savings a	nd por	tfolia investment in I	National Economic Deve	lopment	
	Objective:	1				1		
Sp	pecific Learning	Teachers Activities	Learning	Ś	pecific Learning	Teachers Activities	Learning	Evaluation
	Objectives		Resources	<u>h</u>	Objectives		Resources	
2.1	Define	I.Explain	Textbooks,	2.7	Calculate	Show various	Textbooks,	Quiz
	thefollowing;				interestrates.		Journals	
	Income,	savings	journals and	2.8	Develop personal	methods of		Test
	expenditure and	II Evalain how	other		month	computing interest	and other	
22	Savings. Explain the role	n.explain now	publications.	29	Create a		computer	Assignment
2.2	Explain the role	savings are		2.5	cicule u		computer.	
	of savings in	channeled into			spreadsheet for a			
	of savings in starting and	channeled into productive ventures			spreadsheet for a budget	Guide students to		Examination
	of savings in starting and sustaining	channeled into productive ventures		2.10	spreadsheet for a budget Interpret financial	Guide students to		Examination
	of savings in starting and sustaining businesses.	channeled into productive ventures III. Explain the		2.10	spreadsheet for a budget Interpret financial reports	Guide students to develop a personal budget for one		Examination
2.3	of savings in starting and sustaining businesses. List the benefits	channeled into productive ventures III. Explain the benefits of interest.		2.10	spreadsheet for a budget Interpret financial reports Describe other	Guide students to develop a personal budget for one month		Examination
2.3	of savings in starting and sustaining businesses. List the benefits of interest.	channeled into productive ventures III. Explain the benefits of interest.		2.10 2.11	spreadsheet for a budget Interpret financial reports Describe other investments such	Guide students to develop a personal budget for one month		Examination
2.3 2.4	of savings in starting and sustaining businesses. List the benefits of interest. Explain personal	channeled into productive ventures III. Explain the benefits of interest. IV. Explain the role		2.10 2.11	spreadsheet for a budget Interpret financial reports Describe other investments such as in real estate	Guide students to develop a personal budget for one month		Examination
2.3 2.4	of savings in starting and sustaining businesses. List the benefits of interest. Explain personal financial planning	channeled into productive ventures III. Explain the benefits of interest. IV. Explain the role of budgeting in		2.10 2.11	spreadsheet for a budget Interpret financial reports Describe other investments such as in real estate or stock trading	Guide students to develop a personal budget for one month		Examination
2.3 2.4	of savings in starting and sustaining businesses. List the benefits of interest. Explain personal financial planning and management	channeled into productive ventures III. Explain the benefits of interest. IV. Explain the role of budgeting in personal economics		2.10 2.11	spreadsheet for a budget Interpret financial reports Describe other investments such as in real estate or stock trading	Guide students to develop a personal budget for one month Guide students to		Examination



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2.6	habits. Explain howtaxes are paid on income that people earnand how income tax is calculated.	 V. Describe shopping habits VI. Analyze portfolio investment. VII. Explain thrift societies and how they operate VIII. Explain Tax, and how Personal Income Tax is calculated. 				for a budget Guide students on how to read and interpret financial reports annual reports and accounts of quoted companies/institutii ons Expose students to real estates and commodity trading as other forms of investment visit stock/commodity		
	General Objective: 3: Unc	lerstand various life skil	ls needed by ai	n entrep	oreneur		1	1
S	pecific Learning Objectives	Teachers Activities	Learning Resources	Sp	ecific Learning Objectives	Teachers Activities	Learning Resources	Evaluation
3.1 3.2	Identify thecharacteristics of an entrepreneur. Define Communication	I. Explain the characteristics of an entrepreneur.		3.14 3.15	Analyse adiagram of communication process. Demonstrate skills for	Draw a diagram of the communication process. Use the diagram to		Quiz Test Examination
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3.3	Explain the role of	II. Explain		3.16	teamwork Demonstrate	demonstrate chain of communication	>
	Communication in an enterprise.	communication, its			leadership skills.		
3.4	Define teamwork	role in an		3.17	Prepare a daily	Organise students	
3.5	Identify the characteristics of	enterprise.			personal activities.	into group.	
3.6	teams. List benefits of teamwork in an	III. Explain teamwork team		3.18	Set achievable targets for self.	Assign each team a responsibility that will enable them	
3.7	enterprise. Define	spirit, characteristics			- A	demonstrate team work/spirit.	
3.8	List the qualities and	of teams, and benefits of team			K, CXY		
2.0	good leaders.	work.			Y	Let them select their leaders.	
3.9 3.10	Describe a target. Explain how		Ć				
3.11	targets are set. Explain how a target is achieved.	IV. Explain decision making, types and decision making, types and decision	OF C			Invite a seasoned Administrator/	
3.12	Explain discipline and self – discipline.	making process.				students on leadership.	
3.13	State the benefits of Personal	V. Explain					
	success of an enterprise.	leadership, types of leaders, leadership styles and qualities				Guide students to prepare a "to-do"	
	- Â	of good leadership.				list student should set achievable	
				7	1		

				targets.		
	VI. Explain targets, how they are set and indications of achievement.			Explain indicators of target achievement.		
	VII. Explain the sources and benefits of discipline.					
			XY			
General Objective:	nderstand the various so	urces of inform	ation for entreprene	urship development		
General 4: U Objective: Specific Learning Objectives	nderstand the various so Teachers Activities	urces of inform Learning Resources	ation for entreprene Specific Learnin Objectives	urship development g Teachers Activities	Learning Resources	Evaluation
General Objective: 4: U Specific Learning Objectives 4.1 Identify nature andtype of information required by entrepreneurs.	d information required by	urces of inform Learning Resources Text Books	ation for entreprene Specific Learnin Objectives 4.7 Obtain ther required information from the ne	urship development g Teachers Activities Guide students to conduct a web search on et. information required	Learning Resources Internet	Evaluation Quiz Test
General Objective: 4: U Specific Learning Objectives 4.1 Identify nature andtype of information require by entrepreneurs. 4.2 Identify the sources of the information required in 4.1 above.	nderstand the various so Teachers Activities I. Explain nature of information required by entrepreneurs: . marketing	Learning Resources Text Books Journals Publications Video Film TV & VCR	ation for entreprene Specific Learnin Objectives 4.7 Obtain ther required informatior from the ne 4.8 Classify the informatior into: marketing	g Teachers Activities g Guide students to conduct a web search on et. information required by entrepreneurs. Ask students to develop a similar file	Learning Resources Internet Computer	Evaluation Quiz Test Assignment

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 entrepreneurship. 4.4 Explain the role of banks and financial institutions in enterprise promotion and development. 4.5 Describe the contributions of government agencies in sourcing information. 4.6 Describe methods of obtaining assistance from the above organizations. 	 financial legal II. Explain sources of the information above: catalogues business associations government publications banks mass media libraries consultants assisting agencies trade exhibitions/ 	4.10 4.11	resource file containing samples and addresses for each category of information sources Write a report on the visit Identify clients responsible for providing assistance under each method.	Take students to seminars workshops trade fairs, Trade exhibitions as sources of entrepreneurship information Suide students to identify clients responsible for providing assistance under each method: . personal contacts: - entrepreneur S - professionals - customers . observation: -trade exhibition . interviews:	St	
	. Internet/websites.			- customers		
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						uepartments.		
	General			l				
	Objective: 5: App	reciate the roles of con	nmercial and de	evelopr	ment banks in small	scale industrial develop	nent	
S	pecific Learning	Teachers Activities	Learning	S	pecific Learning	Teachers Activities	Learning	Evaluation
	Objectives		Resources		Objectives		Resources	-
5.1	Identify	I. Explain financial	Text Books	5.6	Guide students	Invite a bank official	Internet	Quiz
	financialinstitutio				on now to	to give a talk on role	Touthealus	Test
	entrepreneurship	in entrepreneurship			hanking	institutions in	lournals	Test
	development.	development.	Journals		relationship	entrepreneurship.	Resource	Assignment
5.2	Describe the		Publications					
	assistance		Video Film				person	
	provided by		TV & VCR		ĊXŸ			
	commercial	II. Explain the roles						
53	Danks. Evolain the role	of commercial and						
5.5	of development	in the promotion						
	banks in the	and development of						
	promotion and	SMEs						
	development of)				
	small and							
	medium		\mathbf{O}					
	enterprises	III. Analyze						
54		government policy						
5.1	government	on mancing sivies						
	policy on							
	financing SMEs							
5.5	Explain the							
	process of							
	healthy Bank	Y						
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				-	75			

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	Account							
	General 6: Kno	w the functions of vario	ous support age	encies i	n small and medium	n scale industrial develop	ment.	
S	pecific Learning Objectives	Teachers Activities	Learning Resources	S	pecific Learning Objectives	Teachers Activities	Learning Resources	Evaluation
6.1	Identify	I. Explain the role	Text Books	6.4	Distinguish	Show transparency	Computer or	Quiz
	varioussupport				among the			
	agencies involved	and functions of the			functions of	of the various	Overhead	Test
	in the promotion	various support			each agency. 👗	support agencies		
	and development	agencies involved in	Journals			involved in	Projector	Assignment
	0T	the promotion and				entrepreneurship		
	in Nigeria	aevelopment of				development and		
6.2	Explain the	entrepreneursnip	Publications			promotion	Posourco	
0.2	following and		Publications				Resource	
	their roles in the						Persons	
	promotion and	II. Explain the roles		ì		Invite officers of		
	development of	of				identified agencies to		
	entrepreneurship					explain their		
	:	research and		2		operations.		
-	. NEPC	academic						
-	. NIPC	institutions of						
-	. NERFUND	higher learning in						
		the development of						
_	SMEDAN	antroproperty	-					
-	. IDC	entrepreneursnip						
-	. TBICs							
-	. Federal and							
	State Ministries							
	of Commerce/							
	Industry	Y						
6.3	Explain the							1
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assistance						
rendered by						
research and						
academic						
institutions in						
entrepreneurship						
development.				× ×		
General 7: Und Objective:	erstand the activities o	of different indu	istrial associations in relation	on to entrepreneurship.		
Specific Learning	Teachers Activities	Learning	Specific Learning	Teachers Activities	Learning	Evaluation
Objectives		Resources	Objectives	Y	Resources	
7.1 Explain	I. Explain the role of	Text books	7.3 Carry out an	Organize an	Computer	Quiz
themeanings of	the National		excursion to a			
the following	Association of Small	Journals	trade fair and	excursion to	Projector	Test
acronyms:	Scale Industrialists	Computer	prepare a	recognized trade fair	Guest	
NASSI	(NASSI) in	Projector	report on the	closest to you	speaker	Assignment
NASME	entrepreneursnip.		Visit.		Internet	
NACCIMA					search.	
			Y			
NECA	U. Deseribe the role					
SIVIEDAN	II. Describe the role					
7.2 Describe the	and functions of the					
functions of each	Association of Small					
of the above in	and					
the development		· ·				
and promotion of	Medium Enternrises					
entrepreneurship	(NASME) in					
	entrepreneurship.					
	Y '					
	III. Describe City,					
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		VI. Describe					
		Nigerian Employer's			4		
		Consultative				$\mathbf{\nabla}$	
		Association (NECA)					
		and its role in					
		entrepreneurship.					
	General 8: Kno Objective:	w the functional areas	of business				
S	pecific Learning	Teachers Activities	Learning	Specific Learning	Teachers Activities	Learning	Evaluation
	Objectives		Resources	Objectives	>	Resources	
8.1	Explain basicmanagemen	I. Explain basic	Text Books	8.14 Explain how to carryout	Guide student to	Computer and	
	t concepts and	management		manpower,	draw up an		
	functions.	concepts and		procurement	organogram.	accessories,	
8.2	Explain the basic		Journals	angr		internet and	
	functions of human capital	Functions.	Publications Video Film	planning.		visitations.	
	management in a	II. Explain the basic	TV & VCR	8,15 Demonstrate	Guide student to		
	small enterprise.	functions of human		how to draw up	draw up manpower		
8.3	Explain the cycle	capital		task/job	and resource need		
	of business	management		description and	for a 3-year circle.		
	growth and need			assign to starr.			
	Tor adequate	in a small and					
	development at	growing enterprise.					
	each stage.	. Defining human					
8.4	Explain labour	resources					
	relations.	objectives					
8.5	Describe the						
	finance function	Designing dynamic					
	in a small	organization					
	enterprise.	structures to					
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8.6	List the books of account necessary for	support the business growth strategy				CF	
	operation of					\mathcal{S}	
	small enterprise.	. Planning for HR					
8.7	Explain financial	needs in line with					
	taxes affecting	growth					
	small enterprise	. Recruitment and					
	operation.	selection					
8.8	Explain the	procedures					
	insurance	for productive staff			×		
	coverage for a						
	small enterprise	. Training and					
8.9	Explain	development of					
	marketingmix to	productive staff					
	the growth and	. Enhancing					
	expansion of a	performance					
0.40	small enterprise.	through motivation					
8.10	Explain the production	and participation					
	function in a	Communication	K) (
	small enterprise:	with staff to enable					
-	. product	growth					
	control						
-	. production	effective work					
	forms and	relationships					
	techniques	required for growth					
-							
-	. Operational	Maintaining					
<u> </u>		employee records		1			
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	bottlenecks in the	and administration				
	areas of order			×	, y	
	intake,	. HR growth plan.				
	procurement,					
	inventory control.					
	distribution,	III. Explain the				
	safety and health	finance function in				
	etc.	a small and growing				
8.11	Explain the	enterprise:	A			
	importance of quality control	Identify courses of				
	and production	husiness finance				
	standards.	and financial needs				
8.12	Explain the need	for a small business.				
	for maintenance					
	management	. Defining the				
	reference to:	finance growth				
-	. routine	objectives				
	maintenance	. Analyzing and				
-	. scheduled	interpreting				
	maintenance	financial statements				
-	. preventive maintenance	for 🧹				
-	. spare parts	growth				
	management					
8.13	Explain staff	. Financial planning				
	training and	and control for				
	of an enterprise	growth				
	or an enterprise.	Carital invoctment				
	\leq	appraisal				
		techniques				
			01			
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		. spare parts management XII. Explain the need for regular capacity building for staff.				LED	Sh	
	General							
	9: Und Objective:	derstand the need for b	usiness plannin	g.				
S	pecific Learning	Teachers Activities	Learning	S	pecific Learning	Teachers Activities	Learning	Evaluation
0.4	Objectives		Resources	0.5	Objectives		Resources	
9.1	Identify a	I. Explain how to	Text Books	9.5	Analyze a	Guide students to	Computer	Quiz
	viablebusiness	idantifiyyiahla			sample project	analuza a comple	and internet	Test
	based on:					analyze a sample	facilities	Test
_	demand	opportunities based	lournals			project report	Tacinties.	Assignment
	availability of	op :	Journais	\mathbf{h}	operational			Assignment
	resources	011.		X	economic			
_	import	demand) /	viability	Guido studonts to		
	substitution	. demand	Publications		methodology.c	prepare a preliminary		
_	export oriented	availability of	Publications		ost-benefit	project report		
	products.		$\mathbf{\mathcal{N}}$		(CBA) analysis			
9.2	Explain the				on			
	different steps in	import			equipmentdeve			
	preparing a	substitution			lopment cost,	Guide students to		
	preliminary				running cost etc	complete the		
	project report	. export oriented						
9.3	Explain how to	products.				business plan of their		
	formulate a					earlier chosen		
	project report. 🔨							
9.4	Explain how to					project.		
	analyze a project	II. Explain the						
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	report	different steps in preparing a preliminary project report.				ED	Sh	
		III. Explain how to prepare and analyzea preliminary project report.			Ŕ	CAL		
					- AY			
	General 10: Ur	derstand the strategies	s for consolidat	ion and	expansion of a bus	iness enterprise		
Si	objective:	Teachers Activities	Learning	Sp	ecific Learning	Teachers Activities	Learning	Evaluation
- •	Objectives		Resources		Objectives		Resources	
10.1	Explain	I. Explain the	Textbooks	10.7	Working in	Use a case study	Use of	Quiz
	thejustification	concept of strategy			pairs the		internet and	
	for business	and types of		P	students should	history of the	relevant	Test
	diversification	strategy.			analyze a	development of a	video clips	
40.0	and expansion.				particular	Nigerian business to		Assignment
10.2	Explain the				business	show the stages of		
	process of	U. Eveloin husing			organization	growth,	T) /	
	diversification	arowth expansion			nossihle	development Focus	IV, Video/CD	
	and expansion in	and diversification			solutions	on a chosen industry	VIGEO/CD	
	an enterprise.				relating to	and the need to		
10.3	Evaluate the				growth and the	diversify.		
	strategies for				influence of			
	consolidation and				multinational			
	expansion of	Y			organizations.			
	business			10.8	Students to	Organise/project		
	AIL			86	5			

10.4 10.5 10.6	ventures. Explain the characteristics of franchise, license and patent systems ofenterprise. Explain how multinational companies operate. Explain how to do business across Nigerian borders.	III. Describe strategies for consolidation and expansion of business. IV. Describe the various types of enterprises and their mode of operation.	10.9	make class presentation Identify examples of franchise and license operations in Nigeria. Identify national and international bodies responsible for patents.	presentation sessions and guide students to analyse the project. Guide students to search the web on the operations of franchises, Jicensesand patents. Invite Officials of NEXIM, NEPC, NEPZA to address the	St	52
		V. Explain the characteristics of franchise, licensing and patents. VI. Relate franchising, licensing, and patents to the operations of multinational corporations.	Stok		Guide students to analyse franchise and licensing opportunities		
	ATI		87	7			



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		VII. Explain: - Internation al trade policies and laws - Foreign cultures - Internation al trade finance.				
	General Objective: 11: Ur	derstand the need for management a	nd business succession pla	n		<u> </u>
Sp	ecific Learning Objectives	Teachers Activities Learning Resources	Specific Learning Objectives	Teachers Activities	Learning Resources	Evaluation
11.1	Explain management succession plan and reasons for corporate formations.	I. Describe the concept of management súccession plan.	 11.4 Prepare a hypothetical succession plan for a business 11.5 Describe steps needed to elect 	Guide students to prepare a succession plan.		Quiz Test Assignment
11.2	Explain the value of continuity and perpetuity in	II. Explain the	Board of Directors for a company	Guide students to negotiate an exit		
	AIL	· · ·	88			

enterprise. 11.3 Explain Exit planning.	benefits of employee participation in corporate ownership.		plan. Guide stude elect Board Directors ar play a board session.	epits to of nd role droom		
PROGRAMME: HND D	ENTAL TECHNOLOGY DDUCTION TO MAXILLO-	FACIAL PROSTHET	C C C C C C C C C C C C C C C C C C C			
COURSE CODE: DTE 4	21					
DURATION	Lecture:-	Tutorial:- Hours	Practical:- hours	Total:- hrs		
CREDIT UNITS:		X				
GOAL: This course is de	signed to provide the students y	with basic knowledge of	Maxillo-Facial prosthetics			
GENERAL OBJECTIVE	S: On completion of the cours	e, the student should be	able to:			
.0 understand introductor	y treatment of fractures related	o Maxillo-facial region.				
.0 Know the classification	and types of fractures associat	ted with:				
i. The skull bones						
ii. The larynx bones						
.0 Understand basic term	s in Maxillo-Facial prosthetics					
.0 Understand the basic n	nanagement principles of cleft l	ip and palate cases.				
	>					

5.0 Understand rudimentary facial prosthetics.

COURSE TITLE: INTRODUCTION TO MAXILLO-FACIAL | Course Code: DTE 421 Contact Hours: hrs PROSTHETICS

COURSE SPECIFICATION: Theoretical content

General Objective 1.0: Understand introductory treatment of fractures related to Maxillo-Facial region.

Specific Learning	Tanchars Activitios	Loorning	Specific Learning	Tanchars Activitios	Learning	Evaluation
Objective Learning	reachers Activities	Deserves	Objective Learning	reachers Acuvilles	Learning	Evaluation
Objectives:		kesources	Objectives:		Resources	
			,			
Encotana valoto d to						
Fractures related to						
Maxillo-facial region						
1.1 Define maxilla-facial						
prosthetics						
		Y				
1.2 Explain the importance						
of maxilla-facial						
prosthetics in						
contemporary dental						
medical practice e.g						
interdisciplinary 🦱						
relationship with other						
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Practical Content:





Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers	Learning	Evaluation
				Activities	Resources	
i. The skull hones					,	
ii. The larvnx bones						
2.1 List the bones of the skull and						
their associated common						
fracture sites.				C X'		
2.2 Identify the bones in 2.1						
above using the following:						
1. Cavider						
iii Slides						
mishdes						
2.3 Identify maxilla-facial						
appliances that are used in the						
management of fractures e.g.						
Barrel Bandage skull plates,						
etc.			\mathbf{Y}			
2.4 Construct each of the						
appliances in 2.5 above.						
5 List the bones of the larvny						
2.5 List the bones of the harynx						
2.6 Locate the bones of the larynx						
-						
2.7 Describe management of the						
bones of the larynx.						
	K					
2.8 Construct various types of						

						07
appliances used in the						
management of the fractures						
of larynx bones.						
General Objective 3.0: Understan	nd basic terms in	maxilla-facial pr	osthetics.		<u> </u>	1
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Terms in maxilla-facial						
prosthetics						
 3.1 Define and explain the following terms Prosthetics Prostheses Fixation Immobilisation I.M.F (inter maxillary fixation) Trauma Congenital Deformities Hemi-Resection Surgical splint Surgical appliance Localisation in relation to maxillafacial prosthetics. 3.2 List relevant appliances in 3.1 (i), (iii), (iv), (vii); (ix); (x) above e.g. obturator, jaw exercises, chin support, Acrylic splints, etc 	BO	RDF	Rechild			
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3.3 Describe the functions of the						
appliances, in 3.2 above.						
3.4 Identify the appliances in 3.2 above					Ç	
3.5 Classify various types of						
appliances used in maxilla-						
prosthesis, etc.						
3.6 List common materials used						
in maxilla-facial prosthetics						
3.7 Identify the materials in 3.6						
above e.g. silicones, ferrous						
oxide dyes, Adhesives, etc.						
3.8 Describe the composition and						
properties of the materials in						
3.7 above			J [*]			
3.9 Describe the principles and						
procedures for the						
construction of various						
appliances from each group of	7					
apphances in 5.5 above		L'				
3.10 Construct the appliances						
from each groups in 3.5						
above.						
General Objective 4.0: Understan	d the basic mana	gement principl	es of cleft lip and palate c	ases.	T	E
Specific Learning Objectives:	1 eachers	Learning	Specific Learning	Leachers	Learning	Evaluation
	Activities	Kesources	Objectives:	Acuviues	Kesources	1
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4.6 Describe the procedure for						
the construction of special						
trays for cleft managements					$\mathbf{)}^{-}$	
4.7 Construct special trays for						
secondary impression of						
clefts						
4.8 Describe the procedures for the construction of model cast			\sim			
from secondary impressions						
4.9 Construct model cast in 4.4						
above						
4.10 Describe the principles						
and procedures for the						
construction of the following:						
(i) Feeding plates (ii)						
Presurgical/Haemostatic						
appliances (iii) presurgical			D'			
orthopaedic appliances						
4.11 Construct appliances						
from 4.10 above.		\mathbf{Q}				
General Objective 5.0: Understan	nd rudimentary f	cial prosthetics	Specific Leouring	Taaabara	Loomina	Evoluction
Specific Learning Objectives:	Activities	Resources	Specific Learning Objectives:	Teachers	Learning	Evaluation
	Retivities	Resources	Objectives.	Activities	Resources	
Rudimentary facial prosthetics						
5.1 Define and explain facial	K í					
prosurenes	۹		I			
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		TIOT
of various facial prostheses 5.11 Construct some commonly used facial prostheses. 5.12 Construct some commonly used facial prostheses		
	RET	r
B	ARDE	
ALIONAL	99	

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PROGRAMME: HN	D DENTAL TECHNOLOGY			\mathbf{C}	
COURSE TITLE: MI	ETALLIC PROSTHODONTIC	CS DENTURES I			
COURSE CODE: DT	E 422				
DURATION	Lecture:-	Tutorial:- 1 hrs	Practical:- 3	nours Total:- 60	hrs
CREDIT UNITS:					
GOAL: This course i	s designed to provide the student	t with the understanding of th	ne principles and tec	aniques employed in the har	ndling of wrought alloys like
lingual bars and clasps	for dental prosthetics		Ċ		
GENERAL OBJECT	IVES: On completion of the cou	urse, the student should be al	ole to:)	
1.0 Understand the cor	nposition and properties of wrou	ight alloys.			
2.0 Know the principle	es and techniques employed in so	oldering and casting and type	s of fluxes used in d	ental alloys	
3.0 Understand the cor	nposition and applications of ant	i-fluxes commonly used in a	lental alloys		
4.0 Understand casting	procedures and investment mate	erials employed in casting a	d the use of picking	solution.	
			Y		
		Q.'			
		\mathbf{N}			
PROGRAMME:HN	D DENTAL TECHNOLOGY				
COURSE TITLE: M	ETALLIC PROSTHODONTIC	CS Course Code	: DTE 422 C	ontact Hours: 60 hrs	
DENTURES I	\sim				
	\sim				
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Specific Learning Objectives:	Seachers Activities	Learning	Succifie Learning			
Composition and properties of wrought alloys		Resources	Objectives:	Teachers Activities	Learning Resources	Evaluation
1.1 Define wrought alloys				C ^r		
1.2 Identify important wrought alloys commonly used in dental prosthetic e.g. gold, stainless steel				N		
.3 Describe the composition of the various alloys						
1.4 State physical properties of each alloy e.g. ductility, modulus of elasticity melting point, etc.		~	R			
1.5 Describe the effect of cold work on wrought alloys		RD				
	- S					
A P						

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General Objective 2.0: Know the	principles and tech	nniques employed	in soldering and casting and type	es of fluxes used in de	ental alloys		
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation	
Soldering and casting and type of fluxes used				E			
2.1 Define and classify various types of soldering							
2.2 Define fluxes and describe their composition			H				
2.3 Explain the principles used in soldering							
2.4 Describe the process of soldering		÷.	St-				
2.5 Solder wrought and cast metal		N'					
General Objective 3.0: Understand the composition and applications of anti-fluxes commonly used in dental alloys							
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation	
Anti-fluxes used in dental alloys							
3.1 Define anti-fluxes							
3.2 State the use and application							
AATIN			102				

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of anti-fluxes						
3.3 Identify the materials					\mathbf{v}	
commonly used in anti-fluxe and their compositions)	
3.4 Apply the use of anti-fluxe						
General Objective 4.0: Understan	d casting procedu	ires and investme	nt materials employed in casti	ng and the use of pick	ing solution	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Casting and use of pickling solution			C'H'			
4.1 State types of investment						
materials used in casting			8			
4.2 Describe the composition and						
properties of the materials in 4.1 above		D'X				
4.3 Carry out casting						
4.4 Define and state the						
composition of pickling solution						
4.5 Explain the uses of pickling solution						
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4.6 Apply the use of picklin solution	g			
			ECHNICA.	
PROGRAMME: HND DE	ENTAL TECHNOLOG	Y FIC DENTURES IN		
COURSE CODE: DTE 42	3			
DURATION	Lecture:- 2	Tutorial:- hrs	Practical:- 3 hrs	Total:- 75 hrs
CREDIT UNITS: 3		\sim		
GOAL: This course is designed modifications for metallic de	igned to provide the stud enture frames	ents with a knowledge of con	nplete design associated with va	arious partial denture classifications and
GENERAL OBJECTIVES	S: On completion of the	course, the student should be	able to:	
1.0 know Kennedy classific	cation of partial dentures			
2.0 understand other classif	fications of metallic parti	al denture		
3.0 understand modification	ns of kennedy classification	ion of metallic partial denture	2	
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/10 know	nrocedures	tor	Way	work	
4.0 KHOW	procedures	101	wan	WUIK	
	1				

- 5.0 understand the investing procedures
- 6.0 know the casting techniques

7.0 understand procedures for finishing and polishing of metal cast skeleton denture.

PROGRAMME:HND DENTAI	L TECHNOLO	GY					
COURSE TITLE:			Course Code: DTE	Contact Hours: h	rs		
COURSE SPECIFICATION: T	heoretical conte	nt	Practical Content:				
General Objective 1.0: Know ke	nnedy classifica	tion of partial d	entures				
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation	
Kennedy classification			U				
1.1 Explain Kennedy							
classification of partial dentures							
1.2 Identify classification of 1.1							
above on various models	× ×						
1.3 Describe relationship of types							
of survey line to each							
classification							

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suitable for 1.3 above						
General Objective 2.0: understan	nd other classific	ation of metallic	partial dentures			1
Specific Learning Objectives:	Teachers	Learning	Specific Learning	Teachers	Learning	Evaluation
	Activities	Resources	Objectives:	Activities	Resources	
Other classification of metallic						
partial dentures						
2.1 Explain the following						
classification of metallic						
partial dentures						
i. Beckett						
ii. cummers						
			2			
2.2 Explain the relationship						
between the classifications in			$\mathbf{\nabla}$			
2.1 above			,			
General Objective 3.0: Understan	nd modifications	s of kennedy class	sification of metallic partia	l denture	·	·
Specific Learning Objectives:	Teachers	Learning	Specific Learning	Teachers	Learning	Evaluation
	Activities	Resources	Objectives:	Activities	Resources	
Modifications of kennedy						
classifications						
3.1 Describe various						
modification						
off kennedy classification	Y					
	1			I		1
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3.2 Explain effect of these modifications on the design of partial denture 1 3.3 Illustrate the design suitable for each modification in 3.1 above 1 General Objective 4.0: Know procedures for wax work Specific Learning Resources Teachers Activities Specific Learning Objectives: Teachers Activities Learning Resources Teachers Activities Procedures for wax work Image: Comparison of the state o							5
3.2 Explain effect of these modifications on the design of partial deture 3.3 Illustrate the design suitable for each modification in 3.1 above General Objective 4.0: Know procedures for wax work Specific Learning Objectives: Teachers Activities Resources Procedures for wax work 4.1 Describe the procedure of blocking-out unwanted under- cuts 4.2 Identify types of materials used for blocking-out unwanted under- cuts 4.3 Explain the techniques and principles of wax suitable for components of the the procedure of the the procedure of the techniques and principles of wax suitable for components of the the procedure of the techniques and principles of wax suitable the techniques and the techniques and						S	V
modifications on the design of partial denture modifications on the design of partial denture 3.3 Illustrate the design suitable for each modification in 3.1 above ister the design suitable for each modification in 3.1 above ister the design of procedures for wax work Specific Learning Objectives: Teachers Activities Learning Resources Procedures for wax work Ister the procedure of blocking-out unwanted under- cuts Ister the techniques and principles of wax-up model for metalitic denture 4.3 Explain the techniques and principles of wax-up model for metalitic denture Ister the techniques and principles of wax suitable for components of the	3.2 Explain effect of these					Cr	
3.3 Illustrate the design suitable for each modification in 3.1 above General Objective 4.0: Know procedures for wax work Specific Learning Objectives: Teachers Activities Resources Objectives for wax work Image: Constraint of the procedure of blocking-out unwanted undercuts 4.2 Identify types of materials Image: Constraint of the procedure of blocking-out unwanted undercuts 4.3 Explain the techniques and principles of wax suitable for components of the procedure of the procedure of blocking-out unwanted undercuts Image: Constraint of the procedure of the procedure of blocking-out unwanted undercuts 4.4 Identify types of wax suitable Image: Constraint of the procedure of the procedure of blocking-out unwanted undercuts Image: Constraint of the procedure of blocking-out unwanted undercuts 4.3 Explain the techniques and principles of wax-up model for metallic denture Image: Constraint of the procedure of blocking-out unwanted undercuts Image: Constraint of the procedure of blocking-out unwanted undercuts 4.4 Identify types of wax suitable Image: Constraint of the procedure	modifications on the design of partial denture						
for each modification in 3.1 above Image: Comparison of the procedures for wax work Evaluation Specific Learning Objectives: Teachers Activities Learning Resources Specific Learning Objectives: Learning Resources Evaluation Procedures for wax work 4.1 Describe the procedure of blocking-out unwanted undercuts Image: Comparison of the procedure of the techniques and principles of wax-up model for metallic denture Image: Comparison of the techniques and principles of the techniques	3.3 Illustrate the design suitable						
General Objective 4.0: Know procedures for wax work Specific Learning Objectives: Teachers Activities Learning Resources Specific Learning Objectives: Learning Activities Resources Evaluation Procedures for wax work 4.1 Describe the procedure of blocking-out unwanted undercuts 4.2 Identify types of materials Image: Colored transform of the procedure and principles of wax-up model for metallic denture Image: Colored transform of the procedure of the proced	for each modification in 3.1 above			Ć			
Specific Learning Objectives: Teachers Activities Learning Resources Specific Learning Objectives: Teachers Activities Learning Resources Procedures for wax work 4.1 Describe the procedure of blocking-out unwanted undercuts 4.2 Identify types of materials used for blocking-out unwanted under cuts Image: Component of the principles of wax-up model for metallic denture Image: Component of the principles of wax suitable for components of the principles of the principles of wax suitable for components of the principles of the prin	General Objective 4.0: Know pro	ocedures for wax	work				
Procedures for wax work Image: Control of the procedure of blocking-out unwanted undercuts 4.1 Describe the procedure of blocking-out unwanted undercuts Image: Control of the procedure of th	Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
4.1 Describe the procedure of blocking-out unwanted under- cuts 4.2 Identify types of materials used for blocking-out unwanted under cuts 4.3 Explain the techniques and principles of wax-up model for metallic denture 4.4 Identify types of wax suitable for components of the	Procedures for wax work						
blocking-out unwanted under- cuts 4.2 Identify types of materials used for blocking-out unwanted under cuts 4.3 Explain the techniques and principles of wax-up model for metallic denture 4.4 Identify types of wax suitable for components of the	4.1 Describe the procedure of			AL A			
4.2 Identify types of materials used for blocking-out unwanted under cuts 4.3 Explain the techniques and principles of wax-up model for metallic denture 4.4 Identify types of wax suitable for components of the	blocking-out unwanted under- cuts			8-1			
used for blocking-out unwanted under cuts 4.3 Explain the techniques and principles of wax-up model for metallic denture 4.4 Identify types of wax suitable for components of the	4.2 Identify types of materials		X				
 4.3 Explain the techniques and principles of wax-up model for metallic denture 4.4 Identify types of wax suitable for components of the 	used for blocking-out unwanted under cuts		R R				
principles of wax-up model for metallic denture 4.4 Identify types of wax suitable for components of the	4.3 Explain the techniques and						
4.4 Identify types of wax suitable for components of the	principles of wax-up model for metallic denture						
for components of the	4.4 Identify types of wax suitable						
	for components of the	1					
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metallic dentures							
 4.5 Explain the principles of spruing for each wax. Pattern/design 4.6 Produce wax for components of the metallic dentures 					Ś	S C	
General Objective 5.0: Understa	and the investing	procedures		,			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:		Teachers Activities	Learning Resources	Evaluation
Investing procedures		Resources	o bjecu vest		receivines		
 5.1 Describe the selection of investment material suitable for various types of metallic cast e.g. Silica bonded Phosphate bonded Gypsum bonded 5.2 Explain the various types of investment technique 5.3 Describe all types of expansion and contraction inherent in investment materials 5.4 Explain why the expansion in 		RDF	Rth				
5.3 above are important							
temperatures of the investment prior to castings	K,						
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						`				
5.6 Explain the term "heating										
soaking General Objective 6.0: Know the casting techniques										
Specific Learning Objectives:	Teachers	Learning	Specific Learning	Teachers	Learning	Evaluation				
Specific Learning Objectives	Activities	Resources	Objectives:	Activities	Resources					
Casting Techniques										
6.1 Identify types of casting machines				CAL						
6.2 Identify the components of the following casting										
machines										
1.Identify types of casting machines										
i. Centrifugals										
ii. Induction										
6.2 Describe the machanism of										
each machines in 6.2 above										
General Objective 7.0: Understa	nd procedures f	or finishing and	polishing of metal cast skele	eton dentures		1				
Specific Learning Objectives:	Teachers	Learning	Specific Learning	Teachers	Learning	Evaluation				
	Activities	Resources	Objectives:	Activities	Resources					
Finishing and polishing										
7.1 Explain the procedures of										
recovering the metal cast										
from different types of										
investment mould										
7.2 Recover the metal casts from										
investment mould	Y									
$\wedge \mathbb{V}$										
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7.3 Define pickling and sandblasting of various cast metallic dentures 7.4 Identify the various cutting and trimming machines employed in the trimming processes 7.5 Trim the cast metallic dentures using the machines in 7.4 above 7.6 Identify the various methods used in polishing the cast metallic dentures 7.7 Polish the cast metallic dentures using the various methods in 7.6 above.

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PROGRAMME: HND D	Jental Technology			V.	
COURSE TITLE: Scien	ce of Dental Materials III				
COURSE CODE: DTE	311		$\mathbf{\overline{X}}$		
DURATION	Lecture:- 1 Hr	Tutorial:-		Practical:- 1 Hr	Total:- 2Hrs/Wk (30Hrs/Sem)
CREDIT UNITS: 2 CU			~		
GOAL: This course is de	esigned to develop the students	understand and application	n of dental allo	ys, modelling and investm	nent materials used in dental technology practices
GENERAL OBJECTIV	ES: On completion of the cour	rse, the student should be al	ble to:		
1.0 Know dental all	loys and polymer base mater	ials in dental technology	practice		
2.0 Know the const	ituents, manipulation and us	es of stainless steel in de	ntal technolo	gy	
3.0 Understand the	effect of heat treatment on the	ne properties of dental all	loys		
4.0 Understand the	materials and techniques for	soldering and welding			
5.0 Understand the	use and importance of invest	tment and modelling mat	terials in den	tal technology	
			111		

PROGRAMME: HND Dental Techno	ology					/	
COURSE TITLE: Science of Dental N	Materials III		Cours	e Code: DTE 311		ontact Hours: 2H	Irs/Wk (30Hrs/Sem)
COURSE SPECIFICATION: Theoret	tical content					Practical Co	ontent:
General Objective: 1.0 Know dental a	lloys and polyme	r base materials in	n dental tec	chnology practice.	×		
Specific Learning Objectives:	Teachers Activities	Learning Reso	urces	Specifie Learning	Teachers Activities	Learning Resources	Evaluation
 1.1 Define an alloy 1.2 List the various types of alloys e.g. binary and eutectic 1.3 Describe the components and properties of the alloys in each category in 1.2 above 1.4 Identify commonly used alloys in dental technology practices e.g. gold alloys, chrome-cobalt, etc. 1.5 Explain the choice of alloys used in prosthetic surgery 1.6 Explain the effect of heat treatment on chosen alloys in 1.4 above 1.7 Carry out heat treatment of a name alloy 	Lecture Explain the concepts covered	Textbooks, Ch Forms, Readin materials.	arts and	Objectives:			Quiz Tests Assignment Examination
JAT10			112				



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constituent in 4.1 above. 4.2 Explain the effect of the following treatments on stainless steel. i. Work-hardening ii. Tempering					DIC	
General Objective: 2.0 Understand th	e effect of heat tre	atment on the properties of	dental allovs			
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 2.1 Define heat treatment 2.2 Describe the principles of heat treatment 2.3 List alloys that could be heat treated e.g. stainless steel, gold alloys, etc 2.4 Carry out heat treatment of a chosen material 2.5 List the constituents and properties of heat treatment alloys 2.6 List the properties obtainable from the alloys after heat treatment 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
AAION		114				

						11017
2.7 Demonstrate with diagrams						
the grain structure of heat						
treated alloys					\mathbf{N}	
General Objective: 3.0 Understand th	ne materials and tec	hniques for soldering and w	velding		Y	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
3.1 Define the following:	Lecture	Textbooks, Charts and Forms, Reading				Quiz
i. Soldering	Explain the	materials.		-		Tests
ii. Welding	covered					Assignment
iv. Fluxes						Examination
v. Solder						
vi. Sweating			*			
vii. Spot welding						
3.2 Describe the mechanism of						
"Joining" in soldering						
3.3 List the types, composition		\mathbf{N}				
and properties of fluxes						
3.4 Describe the various	Or Charles					
methods of heating	\mathbf{S}					
3.5 Explain the principle of soldering						
3.6 List the various types of						
		115				

						1107
solders, composition and their properties						
3.7 List the major hand tools and equipment used in soldering					\mathbf{r}	
3.8 Solder two joints together						
3.9 Explain the general principles of spot welding						
3.10 Identify the tools and equipment used in welding			AT,			
3.11 Carry out welding exercise using equipment in 3.10 above		Ŕ				
General Objective: 4.0 Understand th	e use and important	ce of investment and model	ling materials in	dental technolog	gy	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
4.1 List the constituents and ideal properties of:	Lecture	Textbooks, Charts and Forms, Reading				Quiz
i. Investment materialsii. Modelling materials	concepts covered	materiais.				Assignment
4.2 List various types of investment materials, specifying	80°					Examination
those for precious and non-						
those for precious and non- precious metals4.3 List various types of						



4.11 I	Describe the proce	edure for								
measu	uring the setting tin	me of								
plaste	er of Paris									
4.12 I	Identify the equipn	nent								
used i	if measuring the se	etting								
time of	of plaster of Paris									
PROG	PROGRAMME: HND Dental Technology									
COURSE TITLE: Dental Conservation Prosthetics										
COURSE CODE: DTE 312										
DURA	TION	Lecture:- 2 Hrs	Tutorial:-	Practical:- 3 Hrs	Total:- 5Hrs/Wk (75Hrs/Sem)					
CREDIT UNITS: 2 CU										
GOAL: This course is designed to enable the student understand the principles of bridgework and aesthetic crowns										
GENE	GENERAL OBJECTIVES: On completion of the course, the student should be able to:									
1.0		<i>.</i>								
1.0	Understand the de	etinition of terms associated v	with ceramics and bridg	ework						
2.0	Know the compor	nent parts and types of bridge	\sim							
3.0	Know occlusion f	form in relation to mastication	function and traumation	c occlusion						
4.0	Understand the sh	naping of labial, lingual and p	roximal surfaces in rela	ation to aesthetics, oral hygiene and	phonetics					
5.0	TZ (1 1 C			11						
5.0	Know methods of	f control for gypsum dental re	tractories, waxes and a	lloys to give optimum results						
6.0	Understand the sh	naping of occlusion surfaces f	for inlays and crown to	eliminate premature and balancing	contacts in eccentric relationship					
7.0	Know factors dete	ermining selection of alloy ty	pes and/or acrylic resin	in relation to aesthetics and function	on					

PROGRAMME: HND Dental Tec COURSE TITLE: Dental Conser COURSE SPECIFICATION: The General Objective: 1.0 Understan	chnology vation Prosthetics coretical content d the definition of ten	rms associated w	Course	e Code: DTE 312	Co	ntact Hours: 5H Practical Co	Irs/Wk (75Hrs/Sem) Ontent:
Specific Learning Objectives:	Teachers Activities	Learning Resou	irces	Specific Learning	Teachers Activities	Learning Resources	Evaluation
 1.1 Define and explain the following: Crown (Metallic and nonmetallic) e.g. full veneer partial veneer, combination, jacket, post-retained. Temporary phyroplast veneer etc. Bridges Classes of inlay e.g. Class I, II, III, IV and V Onlays Post and core Occlusal rests Pintedge Pontic Abutment Cervical margin, gingival margin xi. Dies and master castar stone dies, amalgam ores electroformed 	Lecture Explain the concepts covered	Textbooks, Cha Forms, Reading materials.	arts and g				Quiz Tests Assignment Examination
ATIC			119				

	copper dies						ý ý
xii.	Copper bonded and tube						>
	impressions						
xiii.	Domel pins						
xiv.	Rubber base					\mathbf{N}	
	impressions				\sim		
xv.	Porcelain, porcelain						
	fused to metal						
	restorations			(\uparrow		
xvi.	Crown contour						
xvii.	Dental cements						
xviii.	Precious and non-						
	precious metals						
xix.	Gold finess						
XX.	Metal casting and						
	related procedure			\checkmark			
xxi.	Silver plating		Ì				
xxii.	Burnishing						
	6						
Genera	al Objective: 2.0 Know the c	omponent parts and	types of bridge		_		
Genera Specifi	al Objective: 2.0 Know the c c Learning Objectives:	omponent parts and Teachers	types of bridge	Specific	Teachers	Learning	Evaluation
Genera Specifi	al Objective: 2.0 Know the c	omponent parts and Teachers Activities	types of bridge Learning Resources	Specific Learning	Teachers Activities	Learning Resources	Evaluation
Genera Specifi	al Objective: 2.0 Know the c c Learning Objectives:	omponent parts and Teachers Activities	types of bridge Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
Genera Specifi 2.1 De	al Objective: 2.0 Know the c c Learning Objectives: efine dental bridge	omponent parts and Teachers Activities Lecture	types of bridge Learning Resources Textbooks, Charts and	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz
Genera Specifi 2.1 De	al Objective: 2.0 Know the c c Learning Objectives: efine dental bridge	omponent parts and Teachers Activities Lecture	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests
Genera Specifi 2.1 Do 2.2 St	al Objective: 2.0 Know the c c Learning Objectives: efine dental bridge ate indication for	omponent parts and Teachers Activities Lecture Explain the	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests
Genera Specifi 2.1 Do 2.2 St constr	al Objective: 2.0 Know the c c Learning Objectives: efine dental bridge ate indication for ruction of dental bridges	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment
Genera Specifi 2.1 Do 2.2 St constr	al Objective: 2.0 Know the c c Learning Objectives: efine dental bridge ate indication for ruction of dental bridges	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment
Genera Specifi 2.1 Do 2.2 St constr 2.3 Er	al Objective: 2.0 Know the c c Learning Objectives: efine dental bridge ate indication for ruction of dental bridges numerate the component	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination
Genera Specifi 2.1 Do 2.2 St constr 2.3 En parts o	al Objective: 2.0 Know the c c Learning Objectives: effine dental bridge ate indication for ruction of dental bridges numerate the component of a dental bridge	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination
Genera Specifi 2.1 Do 2.2 St constr 2.3 En parts o	al Objective: 2.0 Know the c c Learning Objectives: efine dental bridge ate indication for ruction of dental bridges numerate the component of a dental bridge	omponent parts and Teachers Activities Lecture Explain the concepts covered	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination
Genera Specifi 2.1 Do 2.2 St constr 2.3 Er parts o 2.4 Ex	al Objective: 2.0 Know the c c Learning Objectives: effine dental bridge ate indication for ruction of dental bridges numerate the component of a dental bridge	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination
Genera Specifi 2.1 Do 2.2 St constr 2.3 Er parts o 2.4 Ez and fu	al Objective: 2.0 Know the c c Learning Objectives: effine dental bridge ate indication for ruction of dental bridges numerate the component of a dental bridge kplain the importance	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination
Genera Specifi 2.1 Do 2.2 St constr 2.3 Er parts o 2.4 Ex and fu	al Objective: 2.0 Know the c c Learning Objectives: effine dental bridge ate indication for ruction of dental bridges numerate the component of a dental bridge splain the importance	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination
Genera Specifi 2.1 Do 2.2 St constr 2.3 Er parts o 2.4 Ex and fu	al Objective: 2.0 Know the c c Learning Objectives: effine dental bridge ate indication for ruction of dental bridges numerate the component of a dental bridge splain the importance	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination
Genera Specifi 2.1 Do 2.2 St constr 2.3 Er parts o 2.4 Ex and fu	al Objective: 2.0 Know the c c Learning Objectives: effine dental bridge ate indication for ruction of dental bridges numerate the component of a dental bridge splain the importance	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination
Genera Specifi 2.1 Do 2.2 St constr 2.3 Er parts o 2.4 Ez and fu	al Objective: 2.0 Know the c c Learning Objectives: effine dental bridge ate indication for ruction of dental bridges numerate the component of a dental bridge kplain the importance	omponent parts and Teachers Activities Lecture Explain the concepts covered	types of bridge Learning Resources Textbooks, Charts and Forms, Reading materials.	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation Quiz Tests Assignment Examination

component part of dental bridge						
2.5 Identify the types of dental bridges available in dental technology practices				Ŕ	S	
2.6 Identify materials commonly used in the construction of dental bridges e.g. porcelain, precious alloys, etc.						
2.7 Describe the procedures employed in the fabrication of bridges taking cognizance of common precautions that normally result, into constructional defects		ORT				
2.8 Construct dental bridges using materials listed in 2.6 above		Dre				
2.9 Identify common defects that could arise in the construction of bridges and specify stages	1-BOP					
General Objective: 3.0 Know occl	usion form in relation	on to mastication function and	l traumatic occlus	ion		1
Specific Learning Objectives:	Teachers	Learning Resources	Specific	Teachers	Learning	Evaluation

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	Activities		Learning Objectives:	Activities	Resources	· · · · · · · · · · · · · · · · · · ·
	Lecture	Textbooks, Charts and				Quiz
	Explain the	Forms, Reading materials.			\mathbf{N}	Tests
	concepts covered				x	Assignment
						Examination
General Objective: 4.0 Understand	the shaping of labia	al, lingual and proximal surfa	ces in relation to	aesthétics, oral	hygiene and ph	nonetics
Specific Learning Objectives:	Activities	Learning Resources	Specific Learning Objectives:	Activities	Resources	Evaluation
4.1 Define and explain the	Lecture	Textbooks, Charts and				Quiz
following terms:		Forms, Reading materials.				
	Explain the					Tests
i. Labial Surface	concepts covered]			Assignment
ii. Lingual surface						Assignment
iii. Proximal surface						Examination
iv. Aesthetics						
v. Phonetics		$\mathbf{A}^{\mathbf{Y}}$				
4.2 Describe the process of						
using carving wax to shaping						
the following surfaces:		*				
i. Label						
ii. Lingual						
iii. Proximal						
4.3 Carryout the shaping of						
KY		100				
		122				

						107
surfaces in 4.2 above					\sim	
 4.4 Identify the instruments used for waxing and carring 4.5 Shape the surface in 4.2 above to reflect aesthetics hygiane and phonetics 					ju	
General Objective: 5.0 Know method	ls of control for gyp	sum dental refractories, wa	ixes and alloys to g	ive optimum resu	lts	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 1.1 State the constituents and properties of the following: Gypsum dental refractories (gypsum bonded investment) Waxes Dental alloys 1.2 Explain the significant chemical reactions in the materials listed in 5.1 above 1.3 State common factors affecting the setting time of gypsum bonded investments e.g. waterpounder ratio, spatulation, temperature, etc. 1.4 Control the various rates of expansion in gypsum bonded materials using the factors listed in 5.3 above 1.5 State common factors affecting 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
SAT		123				

the expansion and setting time of curving wax e.g. temperature 1.6 Enumerate the factors affecting the properties of alloys used in the construction of crown and bridges 1.7 Manipulate the factors in 5.6 above to produce well-fitting appliances (bridges and crown General Objective: 6.0 Understan relationship	h) d the shaping of occ	lusion surfaces for inlays and	l crown to élhmin	ate premature ar	nd balancing co	ontacts in eccentric
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 6.1 Define and explain the following: i. Inlays (all classes) ii. Crown iii. Premature contact iv. Balancing contact v. Eccentric relationship 6.2 List and explain the factors affecting the shaping of inlays and crown in relation to the following: i. Premature contact ii. Balancing contact 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials,				Quiz Tests Assignment Examination
AATO		124				

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						1107
iii. Eccentric relationship					()	
6.3 Explain the steps taken in shaping					j	
6.4 Shape crown and inlays to					*	
eliminate premature and						
balancing contacts in						
eccentric relationship						
General Objective: 7.0 Know factor	ors determining sele	ction of alloy types and/or ac	rylic resin in rela	tion to aesthetics	and function	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
7.1 Define and explain the	Lecture	Textbooks, Charts and				Quiz
following:	5 1	Forms, Reading materials				
7.2 Identify common types of	Explain the					Tests
alloys used in the	concepts covered	\mathbf{Q}				Assignment
following:						
7.3 Enumerate factors that						Examination
determine the selection of						
alloys and acrylic resin in		\mathbf{A}				
the construction of crown						
and inlays						
7.4 Select the appropriate						
alloys and acrylic resin for						
the construction of crowns	\sim					
and inlays and crowns						
7.5 Construct inlays and						
crown using selected						
alloys and acrylic resin to						
AN		125				

reflect function and aesthetics aesthetics reflect function and alloys used in dental technology reflect function and the general behaviors of the types of metals and alloys used in dental technology practices General to use the designed to assimilation the students which the history, science, composition and the general behaviors of the types of metals and alloys used in dental technology practices	reflect function and aesthetics aesthetics reflect function and the general behavior technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	
reflect function and aesthetics	reflect function and aesthetics aesthetics reflect function and the general behavior technology practices GENERAL OBJECTIVES (Dreempletion of the course, the student should be able to:	
reflect function and aesthetics aesthetics reflect function and the statement of the students with the history, science, composition and the general behaviors of the types of metals and alloys used in dental technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	reflect function and aesthetics aesthetics reflect function and the general behavior technology COURSE TITLE: Metallurgy in Dental Technology COURSE CODE: DTE 313 DURATION Lecture: - 1 Hr CREDIT UNITS: 2 CU GOAL: This course is designed to acclumente students with the history, science, composition and the general behavior technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	
aesthetics aesthetics aesthetics aesthetics PROGRAMME: HND Dental Technology The Charles of the types of metals and alloys used in dental technology COURSE TITLE: Metallurgy in Dental Technology Tutorial:- COURSE CODE: DTE 313 Practical:- 1 Hr DURATION Lecture:- 1 Hr CRADIT UNITS: 2 CU GOAL: This course is designed to accelerate with the history, science, composition and the general behaviors of the types of metals and alloys used in dental technology practices GENERAL OBJECTIVES: Dimensipletion of the course, the student should be able to:	aesthetics resthetics FROGRAMME: HND Dental Technology COURSE TITLE: Metallurgy in Dental Technology COURSE TITLE: Metallurgy in Dental Technology COURSE CODE: DTE 313 DURATION Lecture:- 1 Hr CREDIT UNITS: 2 CU GOAL: This course is designed to acclument the students with the history, science, composition and the general behavior technology practices GENERAL OBJECTIVES: Oncompletion of the course, the student should be able to:	
PROGRAMME: HND Denial Technology COURSE TITLE: Metallurgy in Denial Technology COURSE TOTLE: Metallurgy in Denial Technology COURSE CODE: DTE 313 DURATION Lecture: 1 Ht Tutorial:- Practical: 1 Hr Total:- 2Hrs/Wk (30Hrs/Sem) CREDIT UNITS: 2 CU GOAL: This course is designed to use built be students with the history, science, composition and the general behaviors of the types of metuls and alloys used in dental technology practices GENERAL OBJECTIVES: Our completion of the course, the student should be able to:	PROGRAMME: HND Dental Technology FROGRAMME: HND Dental Technology COURSE TITLE: Metallurgy in Dental Technology COURSE CODE: DTE 313 DURATION Lecture: - 1 Hy Tutorial:- Practical: - 1 Hr CREDIT UNITS: 2 CU GOAL: This course is designed to acquising the students with the history, science, composition and the general behavior technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	
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PROGRAMME: HND Dental Technology COURSE TITLE: Metallurgy in Dental Technology COURSE CODE: DTE 313 DURATION Lecture: - 1 Hr Total: - 2Hrs/Wk (30Hrs/Sem) CREDIT UNITS: 2 CU GOAL: This course is designed to acquain the students with the history, science, composition and the general behaviors of the types of metals and alloys used in dental technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	PROGRAMME: HND Dental Technology COURSE TITLE: Metallurgy in Dental Technology COURSE CODE: DTE 313 DURATION Lecture: - 1 Hr Tutorial:- Practical: - 1 Hr CREDIT UNITS: 2 CU GOAL: This course is designed to acquing the students with the history, science, composition and the general behavior technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	
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COURSE TITLE: Metallurgy in Dental Technology COURSE CODE: DTE 313 DURATION Lecture:-1 Hr Total:- 2Hrs/Wk (30Hrs/Sem) CREDIT UNITS: 2 CU GOAL: This course is designed to acquain the students with the history, science, composition and the general behaviors of the types of metals and alloys used in dental technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	COURSE TITLE: Metallurgy in Dental Technology COURSE CODE: DTE 313 DURATION Lecture:- 1 Hr Tutorial:- Practical:- 1 Hr CREDIT UNITS: 2 CU GOAL: This course is designed to acquain the students with the history, science, composition and the general behavior technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to: 126	
COURSE CODE: DTE 313 DURATION Lecture:-1 Hr Tutorial:- Practical:- 1 Hr Total:- 2Hrs/Wk (30Hrs/Sem) CREDIT UNITS: 2 CU GOAL: This course is designed to acquain the students with the history, science, composition and the general behaviors of the types of metals and alloys used in dental technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	COURSE CODE: DTE 313 DURATION Lecture:- 1 Hr Tutorial:- Practical:- 1 Hr CREDIT UNITS: 2 CU GOAL: This course is designed to acquain the students with the history, science, composition and the general behavior technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to: 126	
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CREDIT UNITS: 2 CU GOAL: This course is designed to acquain the students with the history, science, composition and the general behaviors of the types of metals and alloys used in dental technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	CREDIT UNITS: 2 CU GOAL: This course is designed to acquain the students with the history, science, composition and the general behavior technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to: 126	Total:- 2Hrs/Wk (30Hrs/Sem)
GOAL: This course is designed to acquain the students with the history, science, composition and the general behaviors of the types of metals and alloys used in dental technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	GOAL: This course is designed to acquain the students with the history, science, composition and the general behavior technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to: 126	I
technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to:	technology practices GENERAL OBJECTIVES: On completion of the course, the student should be able to: 126	rs of the types of metals and alloys used in dental
GENERAL OBJECTIVES: On completion of the course, the student should be able to:	GENERAL OBJECTIVES: On completion of the course, the student should be able to: 126	
	126	
	126	
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126		
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- Know the range of metals in the periodic table used in dentistry 1.0
- 2.0 Understand the science of metals and alloys
- 3.0 Understand the factors the influence choice of precious metals and other types of metals for dental restoration
- Understand the technology of heat treatment and other manipulatory treatments of metal for dental purposes 4.0

PROGRAMME: HND Dental Tech	nology							
COURSE TITLE: Metallurgy in Dental Technology Course Code: DTE 313 Contact Hours: 2Hrs/Wk (30Hrs/Sem)								
COURSE SPECIFICATION: Theoretical content Practical Content:								
General Objective: 1.0 Know the r	ange of metals in th	e periodic table used in d	entistry					
Specific Learning Objectives:	Teachers	Learning Resources	Specific	Teachers	Learning	Evaluation		
	Activities		Learning Objectives:	Activities	Resources			
1.1 List all the metals used in	Lecture	Textbooks, Charts and				Quiz		
dental technology and their		Forms, Reading						
melting points and densities	Explain the	materials.				Tests		
1.2 Describe the extraction from	concepts covered							
ore, important metals such						Assignment		
as gold, copper, platinum								
		1	27					

						T107
and chromium cobalt 1.3 Define density, specific gravity and melting point 1.4 State the effects of the					j	Examination
factors in 1.3 above on						
metals during manipulation		1 1 11				
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
2.1 Define metal and alloy	Lecture	Textbooks, Charts and Forms Reading materials				Quiz
2.2 Demonstrate the concept	Explain the	Torins, Reading materials.				Tests
of adhesion, cohesion and inter-atomic forces in	concepts covered		\bigcirc			Assignment
metallic crystals, changes of						
stress and strain			1			Examination
2.3 Define and explain						
primary inter-atomic bonds						
e.g. primary bonding forces						
and secondary bonding forces						
or Van der wal forces						
General Objective: 3.0 Understand	l the factors the influ	nence choice of precious meta	ls and other type	es of metals for c	lental restoration	on
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
3.1 Explain chemical and	Lecture	Textbooks, Charts and				Quiz
physical reactions of metals		Forms, Reading materials.				
used in dental technology e.g.	Explain the					Tests
galramic shock	concepts covered					Assignment
AAI		128				1



							TIOT
iv. N	Malleability						
v. (Creep						
vi. F	Flow					$\mathbf{\lambda}$	
vii. 7	Foughness						
viii. H	Brittleness						
ix. I	Hardness						
General (Objective: 4.0 Understand	the technology of h	eat treatment and other manij	pulatory treatmen	ts of metal for de	ental purposes	
Specific I	Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
4.1 Defi	ine and demonstrate	Lecture	Textbooks, Charts and		-		Quiz
heat	t treatment of metals		Forms, Reading materials.				
e.g.	annealing, heating	Explain the		Ċ X Ÿ			Tests
soak	king, etc.	concepts covered					Assignment
4.2 Den	nonstrate and						Assignment
desc	cribe Tensile stress			7			Examination
and	strain, compressive						
stres	ss and strain, shear						
stres	ss and strain, and						
wett	ting surface energy						
4.3 Use	graphs to illustrate						
the	following:						
i	Tensile stress and						
	strain		Y				
ii	Sheer stress and						
	strain						
L			130			<u> </u>	

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PROGRAMME: HND D	ental Technology			
COURSE TITLE: Compl	ete Dental Prosthetics II			
COURSE CODE: DTE 3	14			\sim
DURATION	Lecture:- 2 Hrs	Tutorial:-	Practical:- 2 Hrs	Total:- 4Hrs/Wk (60Hrs/Sem)
CREDIT UNITS: 2 CU				
GOAL: This course is des	igned to provide the students	s with the understanding of advance	ed principles and technique	a involved in the setting and production of complete
dentures				Y
GENERAL OBJECTIVE	S: On completion of the cou	rse, the student should be able to:		·
 2.0 Understand the pr 3.0 Understand the pr 4.0 Understand the cl prosthesis 	adications for and immedi rinciples of design and me linical factors that determi	ate denture restorations othods of construction for compl ne the choice of immediate rest	ete dentures orations and the effect o	f operative techniques on the design of the final
PROGRAMME: HND Der	ntal Technology			
COURSE IITLE: Compl	ete Dental Prosthetics II	Course	.oae: DIE 314	Contact Hours: 4Hrs/WK (60Hrs/Sem)
COURSE SPECIFICATIO	DN: Theoretical content			Practical Content:
General Objective: 1.0 Un	derstand the principles of	occlusion, retention and stabilit	y in the construction of o	complete denture in classes I relationships
	J			



Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
1.1 Define and explain the	Lecture	Textbooks, Charts and				Quiz
following:		Forms, Reading			\mathbf{N}	
i. Occlusion	Explain the	materials.				Tests
ii. Retention	concepts covered				7	Aggionment
iii. Stability						Assignment
1v. Class II jaw				\uparrow \checkmark		Examination
relationship				\mathbf{N}		
v. Class III jaw						
relationship						
2 Explain tooth positions in						
.2 Explain tooth positions in						
relationships						
3 Explain associated skeletal						
structures in classes II and						
III						
4 Describe the procedure for						
positioning teeth in classes						
II and III occlusal						
relationship		$\boldsymbol{\mathcal{A}}$				
.5 Demonstration the						
principles of articulation						
and balanced occlusion in		*				
both jaw relationships						
.6 Define and explain the						
following:						
i. Curve of spee						
ii. Curve of monsoon	V~					
iii. Cohesion	×					



						ALC: N
of occlusion						
3.6 Define mastication					i v	
3.7 Explain the relationship					N	
between mastication and						
occlusion						
3.8 Demonstrate the						
relationship between			($\uparrow X^{\bullet}$		
mastication and occlusion						
General Objective: 2.0 Understand	l the indications for	ant the limitations of immedia	ate denture restor	ations		
Specific Learning Objectives:	Teachers	Learning Resources	Specific	Teachers	Learning	Evaluation
	Activities		Dearning	Activities	Resources	
2.1 Define and explain a	Lecture	Textbooks Charts and	Objectives.			Ouiz
complete immediate denture	Locture	Forms, Reading materials.				Quil
	Explain the		7			Tests
2.2 State indications and	concepts covered					
contra-indications for the						Assignment
construction of complete						
immediate dentures						Examination
2.3 State the advantages of						
complete immediate denture						
General Objective: 3.0 Understand	l the principles of de	sign and methods of construc	tion for complet	e dentures		
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
3.1 Prepare complete denture	Lecture	Textbooks, Charts and				Quiz
applying the principles \checkmark		Forms, Reading materials.				
involved	Explain the					Tests
AAID		134	1	1		1

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 3.2 Identify the various types of complete immediate dentures e.g. socketed and flanged with alveolectomy etc. 3.3 State the role of 	concepts covered				DIC	Assignment Examination
alveoplastry in complete immediate denture						
3.4 Demonstrate the principle and techniques of alveoplastry on a given patient's model			CH			
3.5 Construct various types of						
General Objective: 4.0 Understand	l the clinical factors	that determine the choice of i	mmediate restor	ations and the et	fect of operativ	e techniques on the design
of the final prosthesis	1		1	- 1		
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
4.1 State the clinical factors	Lecture	Textbooks, Charts and Forms, Reading materials.				Quiz
determine the choice of	Explain the					Tests
immediate restorations e.g. trauma pathology						Assignment
etc.						Examination
involved in the recording						
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of Axes and gingival margins of teeth for extraction			,
4.3 Remove standing teeth,		\sim	
leaving the gingival			
4 4 Explain reasons for depth		×	
variation of the sockets			
i.e. lebialy and palatally			
R R	shap for		

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PROGRAMME: HND De	ntal Technology			
COURSE TITLE: Dental	Prosthetics Technology III			
COURSE CODE: DTE 3	15			\sim
DURATION	Lecture:- 1 Hr	Tutorial:-	Practical:- 2 Hrs	s Total:- 3Hrs/Wk (45Hrs/Sem)
CREDIT UNITS: 2 CU				
GOAL: This course is des	signed to enable the students ac	quire the techniques for the	design and construction of f	full and partial dentures
JENERAL OBJECTIVE	S: On completion of the cours	e, the student should be able	e to:	
			V	
PROGRAMME: HND De	ental Technology	RDFOR		
PROGRAMME: HND De COURSE TITLE: Denta	ental Technology I Prosthetics Technology III	RDFOR RDFOR	urse Code: DTE 315	Contact Hours: 3Hrs/Wk (45Hrs/Sem)
PROGRAMME: HND De COURSE TITLE: Denta COURSE SPECIFICATIO	ental Technology I Prosthetics Technology III ON: Theoretical content	ROF CO	urse Code: DTE 315	Contact Hours: 3Hrs/Wk (45Hrs/Sem) Practical Content:

pecific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 Define articulators Identify various types of articulators e.g. simple hinge articulator, semi- adjustable articulator and anatomical articulator Describe the various components of a semi- adjustable articulators and its functions Draw and label a semi- adjustable articulator Explain the working principles of a semi- adjustable articulator Explain the working principles of a semi- adjustable articulator Mount upper and lower cast using a semi-adjustable articulator Explain the term facebow and its importance Explain the indications for the use of face bow State the requirement necessary for the recording of centric and eccentric occlusions 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination

				1		
General Objective: 2.0 Understand	the principles and t	echniques for mounting casts	s on fully adjusta	ble articulators u	sing facebow 1	recordings
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
2.1 Describe the use of fully	Lecture	Textbooks, Charts and				Quiz
adjustable articulator		Forms, Reading materials.				
	Explain the			\uparrow		Tests
2.2 Identify the component	concepts covered					Assignment
parts of a fully adjustable						Assignment
						Examination
2.3 State the importance of						
facebow while mounting on		~				
fully adjustable articulator						
2.4 Construct upper and lower record rims in preparation for clinical recordings		FOR				
2.5 Mount upper and lower						
records rims on a full						
adjustbale articulator taking						
cognizance of the vertical and						
horizontal inclinations for the						
condylar mechanism using						
facebow						
General Objective: 3.0 Know the r	easons for the provi	sion of and procedures for co	onstructing duplic	cate dentures	T	Engline 4
Specific Learning Objectives:	Activities	Learning Resources	Specific Learning	Teachers Activities	Learning Resources	Evaluation
	1	139				1

			Objectives:			Y
3.1 Define duplicate dentures	Lecture	Textbooks, Charts and				Quiz
	E	Forms, Reading materials.				Teste
3.2 Enumerate indications for	Explain the					Tests
the duplication of dentures	concepts covered					Assignment
3.3 Explain the advantages						
and limitations of duplicate						Examination
dentures				\uparrow		
2.4 Identify the meterials						
needed for the reconstruction						
of a duplicate denture						
3.5 Describe the principles						
and procedures for						
constructing duplicate						
dentures						
3.6 Reconstruct a given						
existing complete upper and						
lower dentures						
General Objective: 4.0 Understand	l the clinical factors	which determine the use of re	silient liners in c	complete and part	ial dentures	1
Specific Learning Objectives:	Teachers	Bearning Resources	Specific Learning	Teachers Activities	Learning Resources	Evaluation
			Objectives:	Activities	Resources	
4.1 Define and give	Lecture	Textbooks, Charts and				Quiz
examples of resilient		Forms, Reading materials.				
liners	Explain the					Tests
4.2 Enumerate the	concepts covered					Assignment
composition and ideal						
		140				
properties of	resilient			Examination		
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liners						
4.3 State clinical	reasons for					
the use of rest	ilient liners					
4.4 Describe the	principles of					
incorporation	of resilient					
liners into an	existing			\sim $ $		
denture						
4.5 Incorporate re	esilient					
liners into exi	isting					
dentures						
PROGRAMME: HN	ND Dental Technology (Moved	to dental Anatomy)	X			
COURSE TITLE: H	Functional Anatomy of Masticat	tion, Swallowing and Speech				
COURSE CODE: D	DTE 316					
DURATION	Lecture:- 1 Hr	Tutorial:-	Practical:-	Total:- 1Hr/Wk (15Hrs/Sem)		
CREDIT UNITS: 1	I CU					
GOAL: This course	e is designed to enable the student	s understand the influence of n	nuscles in the design of prosthesis	and its retention without impairing speech and ma	astication	
GENERAL OBJEC	TIVES: On completion of the co	ourse, the student should be abl	e to:			
)				
1.0 Understand	the role of cheek muscles and	the surrounding tissues in t	he retention of prosthesis in the	oral cavity		
2.0 Know how	speech and mastication can be	improved	the recention of prostnesis in the	e of all cavity		
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PROGRAMME: HND Dental Tech COURSE TITLE: Functional Ana and Speech	nnology ntomy of Mastication	Swallowing	Course	e Code: DTE 316	Co	ontact Hours: 11	Hr/Wk (15Hrs/Sem)
COURSE SPECIFICATION: The	oretical content					Practical Co	ontent:
Specific Learning Objectives:	Teachers Activities	Learning Resou	irces	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 1.1 Define and explain the following: 1.2 List the muscles of mastication e.g. buccinators, masseter, etc. 1.3 Explain the functions and importance of the muscles listed in 1.2 above prosthesis retention 1.4 List the muscles of facial expression e.g. Modiolus, orbicularis oris etc. 1.5 Explain the functions and importance of muscles listed in 1.4 above in prosthesis retention 1.6 Identify the muscles listed in 1.2 and 1.4 above using 	Lecture Explain the concepts covered	Textbooks, Cha Forms, Reading materials.	arts and g				Quiz Tests Assignment Examination
SAID			142				

models, slides and chart						K Y
flips		· 1 · 1				
General Objective: 2.0 Know now Specific Learning Objectives:	Teachers	Learning Resources	Specific	Teachers	Tearning	Evaluation
opecnie Dearning Objectives.	Activities	Learning Resources	Learning Objectives:	Activities	Resources	Lyaluation
2.1 List factors considered in	Lecture	Textbooks, Charts and				Quiz
designing and	Explain the	Forms, Reading materials.				Tests
constructing prosthesis	concepts covered					
mastication						Assignment
2.2 Explain the effects of the						Examination
factors in 1.2 above on			XY			
design and construction		~				
of prosthesis						
	BOR	RDFOr				
PROGRAMME: HND Dental Tec	hnology					
COURSE TITLE: Principles of D	enture Repairs, Relin	ing, Rebasing and Addition				
		143				

COURSE CODE: DTI	E 317				\sim	
URATION	Lecture:- 2 Hrs	Tutorial:-	Practical:-	2 Hrs	Total: 4H	rs/Wk (60Hrs/Sem)
REDIT UNITS: 2 C	U				$\overline{\boldsymbol{\lambda}}$	
DAL: This course is	designed to acquaint students v	with the principles and p	procedures of denture repair, r	refining, rebasing	and addition of p	rosthesis
NERAL OBJECTIV	VES: On completion of the co	urse, the student should	be able to:		\mathbf{O}^{\prime}	
ROGRAMME: HND OURSE TITLE: Prin	Dental Technology nciples of Denture Repairs, R	elining, Rebasing	Course Code: DTE 317		ontact Hours: 4F	Ir/Wk (60Hrs/Sem)
ROGRAMME: HND DURSE TITLE: Prin d Addition	Dental Technology nciples of Denture Repairs, R	elining, Rebasing	Course Code: DTE 317	C	ontact Hours: 4	Ir/Wk (60Hrs/Sem)
ROGRAMME: HND DURSE TITLE: Prin d Addition DURSE SPECIFICA	Dental Technology nciples of Denture Repairs, R TION: Theoretical content	elining, Rebasing	Course Code: DTE 317	C	ontact Hours: 4F Practical Co	Hr/Wk (60Hrs/Sem) ontent:
ROGRAMME: HND OURSE TITLE: Prin 1d Addition OURSE SPECIFICA eneral Objective: 1.0	Dental Technology nciples of Denture Repairs, R TION: Theoretical content Know desiduous and perma	elining, Rebasing	Course Code: DTE 317		ontact Hours: 4F Practical Co	Hr/Wk (60Hrs/Sem)
ROGRAMME: HND OURSE TITLE: Prin 1d Addition OURSE SPECIFICA eneral Objective: 1.0 pecific Learning Obje	Dental Technology nciples of Denture Repairs, R TION: Theoretical content Know deciduous and perma ctives: Téachers Activities	elining, Rebasing nent dentation Learning Resour	Course Code: DTE 317	C. Teachers	ontact Hours: 4F Practical Co	Hr/Wk (60Hrs/Sem) ontent: Evaluation

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			Objectives .			
 1.1 Define and explain the following: Repair Relining Rebasing Addition 1.2 State the reason for each of the procedures in 1.1 above 1.3 List the importance of the procedures in 1.1 above 1.4 State the limitations of the 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.	Objectives:		DIC .	Quiz Tests Assignment Examination
procedures in 1.1 above						
General Objective: 2.0 Understand	the morphology of	the teeth			1	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
 2.1 Explain the principles involved in the following: Repairs Relining Rebasing Rebasing Addition of Prosthesis 2.2 Describe the process involved in undertaking the repair of broken dental prosthesis 2.3 Identify the materials required in the repair of 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials				Quiz Tests Assignment Examination
AAT		145				



				TION
2.12 Carry out relining rebasing, and rep- involving impress taking	g, air sion			JUC
PROGRAMME: HND I	Dental Technology			
COURSE TITLE: Polyr	ner Chemistry			
COURSE CODE: PLT 2	211			
DURATION	Lecture:- 1 Hr	Tutorial:-	Practical:- 2 Hrs	Total:- 3Hrs/Wk (45Hrs/Sem)
CREDIT UNITS: 2 CU			Y	
GOAL: This course is de	esigned to provide the student	s with the basic knowledge c	f Chemistry of Polymers	
GENERAL OBJECTIV	ES: On completion of the cou	irse, the student should be ab	le to:	
 Understand the Understand the Understand the Understand the 	basic principles of polymer Chemistry of Polymer Synt technique for the commerce	science hesis al production of polymers	;	
AAT	<u>J</u>		147	

						nic	
						,	
PROGRAMME: HND Dental Tec	chnology						
COURSE TITLE: Polymer Chen	nistry		Course	e Code: PLT 211	Co	ntact Hours: 3H	Irs/Wk (45Hrs/Sem)
COURSE SPECIFICATION: The	eoretical content					Practical Co	ontent:
General Objective: 1.0 Understan	d the basic principles	of polymer scie	ence	C Y			
Specific Learning Objectives:	Teachers Activities	Learning Resou	urces	Specific Learning	Teachers Activities	Learning Resources	Evaluation
 1.1 Define Polymers 1.2 Classify Polymers 1.3 List the general properties of Polymers 1.4 Describe the physical and molecular structure of polymers 1.5 Carryout the following simple test to identify a polymer 1.6 Explain average molar mass and molar mass distribution 1.7 Determine average molar mass of polymer by the following methods: 	Lecture Explain the concepts covered	Textbooks, Ch Forms, Readin materials	arts and	<u>Objectives:</u>			Quiz Tests Assignment Examination
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viscometer, osmometer,					\dot{c}	
boiling point elevation and						
end group analysis						
1.8 Explain the importance of						
molar mass distribution in						
selecting a polymer material						
for a particular application						
1.9 Explain the terms: Glass						
transit/Temperature (Tg)						
and melting temperature				\cup		
1.10 List the factors affecting 1g						
and Im						
Delymers by yelume			Ċ X Y			
avpansion coefficient						
Concret Objective: 2.0 Understand	the Chemistry of P	olymor Synthesis	· · · · · · · · · · · · · · · · · · ·			
Specific Learning Objectives	Teachers	Learning Resources	Specific	Teachers	Learning	Fyaluation
Specific Learning Objectives.	Activities		Learning Objectives:	Activities	Resources	
2.1 Define polymerization,	Lecture	Textbooks, Charts and				Quiz
functionality and degree of		Forms, Reading materials.				
functionality and degree of polymerization	Explain the	Forms, Reading materials.				Tests
functionality and degree of polymerization	Explain the concepts covered	Forms, Reading materials.				Tests
functionality and degree of polymerization 2.2 Classify polymerization	Explain the concepts covered	Forms, Reading materials.				Tests Assignment
functionality and degree of polymerization 2.2 Classify polymerization process	Explain the concepts covered	Forms, Reading materials.				Tests Assignment
functionality and degree of polymerization 2.2 Classify polymerization process	Explain the concepts covered	Forms, Reading materials.				Tests Assignment Examination
functionality and degree of polymerization2.2 Classify polymerization process2.3 Outline the mechanism of	Explain the concepts covered	Forms, Reading materials.				Tests Assignment Examination
 functionality and degree of polymerization 2.2 Classify polymerization process 2.3 Outline the mechanism of chain polymerization (free 	Explain the concepts covered	Forms, Reading materials.				Tests Assignment Examination
 functionality and degree of polymerization 2.2 Classify polymerization process 2.3 Outline the mechanism of chain polymerization (free radical) 	Explain the concepts covered	Forms, Reading materials.				Tests Assignment Examination
 functionality and degree of polymerization 2.2 Classify polymerization process 2.3 Outline the mechanism of chain polymerization (free radical) 	Explain the concepts covered	Forms, Reading materials.				Tests Assignment Examination
 functionality and degree of polymerization 2.2 Classify polymerization process 2.3 Outline the mechanism of chain polymerization (free radical) 2.4 Outline the mechanism of 	Explain the concepts covered	Forms, Reading materials.				Tests Assignment Examination
 functionality and degree of polymerization 2.2 Classify polymerization process 2.3 Outline the mechanism of chain polymerization (free radical) 2.4 Outline the mechanism of step-growth polymerization 	Explain the concepts covered	Forms, Reading materials.				Tests Assignment Examination

						TION
 2.5 Compare chain polymerization and step- growth polymerization 2.6 Define copolymerization 2.7 Classify copolymers into: Black, random, and graft copolymers 					DIC	
General Objective: 3.0 Understand	the technique for th	ne commercial production of	f polymers		Taran	England on
Specific Learning Objectives:	Activities	Learning Resources	Specific Learning Objectives:	Activities	Learning Resources	Evaluation
 3.1 Identify and describe the different techniques of producing polymers commercially 3.2 Outline the process of bulk polymerization 3.3 List the advantages and disadvantage of bulk polymerization 3.4 Outline the process of suspension polymerization 3.5 List the advantages and disadvantages of suspension polymerization 3.6 Outline the process of solution polymerization 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
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 3.7 List the advantages and disadvantages of solution polymerization 3.8 Outline the process of emulsion polymerization 3.9 List the advantages and disadvantages of emulsion polymerization 3.10 Prepare different polymers using the techniques listed in 3.1 above 				
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PROGRAMME: HND Dental Technology				
COURSE TITLE: Primary Oral Health Care	S			
COURSE CODE: DTH 313	$\langle \cdot \rangle$			
DURATION Lecture:- 1 Hr	Tutorial:-	Practical:- 1 Hr	Total:- 2Hrs/Wk (30)	Hrs/Sem)
CREDIT UNITS: 2 CU	I	I	I	
GOAL: This course is designed to provide the students	with the knowledge of the com	mon oral diseases and their manag	gement in accordance with the F	Primary Oral Health Care
standing orders				
GENERAL OBJECTIVES: On completion of the cour	rse, the student should be able t	0:		
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 1.0 Know healthy oral tissu 2.0 Know the general preve 3.0 Know the epidemiology 	tes, diagnosis and aet entive and control me y of dental diseases in	tiology of common oral diseateasures of common dental diseatent of a community	ises seases			
			7			
PROGRAMME: HND Dental T	echnology		va Cadar DTH 212	Co	nto at Hound 21	Inc/XX/Ir (2011wc/Com)
PROGRAMME: HND Dental T COURSE TITLE: Primary Ora COURSE SPECIFICATION: T	echnology Il Health Care heoretical content	Cours	e Code: DTH 313	Co	ontact Hours: 2H Practical Co	Hrs/Wk (30Hrs/Sem)
PROGRAMME: HND Dental T COURSE TITLE: Primary Ora COURSE SPECIFICATION: T General Objective: 1.0 Know he	echnology Il Health Care heoretical content ealthy oral tissues, dia	agnosts and actiology of com	e Code: DTH 313	Co	ontact Hours: 2H Practical Co	Irs/Wk (30Hrs/Sem) ontent:
PROGRAMME: HND Dental T COURSE TITLE: Primary Ora COURSE SPECIFICATION: T General Objective: 1.0 Know he Specific Learning Objectives:	echnology Il Health Care heoretical content ealthy oral tissues, dia Teachers Activities	agnosts and actiology of com	e Code: DTH 313	Teachers Activities	ontact Hours: 2H Practical Co Learning Resources	Hrs/Wk (30Hrs/Sem) ontent: Evaluation
 PROGRAMME: HND Dental T COURSE TITLE: Primary Ora COURSE SPECIFICATION: T General Objective: 1.0 Know he Specific Learning Objectives: 1.1 Define oral health 1.2 Describe the anatomy of the mouth in relation to teeth and gingivae 	echnology Il Health Care heoretical content calthy oral tissues, dia Teachers Activities Lecture Explain the concepts covered	agnosts and aetiology of com Learning Resources Textbooks, Charts and Forms, Reading materials.	e Code: DTH 313 amon oral diseases Specific Learning Objectives:	Teachers Activities	ontact Hours: 2H Practical Co Learning Resources	Irs/Wk (30Hrs/Sem) ontent: Evaluation Quiz Tests



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above						
2.3 Design an oral health education programme for the prevention and control of oral dental diseases in a community				<u> </u>	DU	
General Objective: 3.0 Know the e Specific Learning Objectives:	Teachers	Learning Resources		Teachers	Learning	Evaluation
Speenie Zenining Oxjeeniesi	Activities		Learning Objectives:	Activities	Resources	
 3.1 Define epidemiology 3.2 Define the common terminologies used in epidemiology e.g. incidence, prevalence, endemic, epidemic, pandemic, etc. 3.3 Explain the epidemiological factors responsible for the prevention of: 3.4 Gather epidemiological data from a community 3.5 Diagnose and treat identified dental diseases in 3.3 above in a rural community 3.6 Design an oral education programme for the 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials.				Quiz Tests Assignment Examination
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prevention of t	he disease				
in 3.4 above in	a rural				
community					
PROGRAMME: HN	D Dental Technol	ogy		4	
COURSE TITLE: Pa	rtial Dental Prost	hodontics I			Y
COURSE CODE: DT	TE 321				
DURATION	Lecture:- 1	Hr	Tutorial:-	Practical:- 3 Hrs	Total:- 4Hrs/Wk (60Hrs/Sem)
CREDIT UNITS: 2	CU				
GOAL: This course i	s designed to acqua	int students with th	e knowledge of tooth-bo	rne partial denture design, constru	action and applications
GENERAL OBJECT	IVES: On complete	tion of the course, t	he student should be able	e tox	
 1.0 Understand t 2.0 Understand t 3.0 Understand t 4.0 Understand t 	he principles of to he principles of " he principles of do he principles and	ooth-borne partial lost wax" process ental application of process of solder	denture design and co in metal casting and it of metal melting and fi ing dentaballoys	nstruction s dental applications nishing systems	
AA			1	55	

COURSE TITLE: Partial Dental I	Prosthetics		Course	Code: DTE 321	Cont	act Hours: 4H	rs/Wk (60Hrs/Sem)
COURSE SPECIFICATION: Theoretical content				I	Practical Co	ontent:	
General Objective: 1.0 Understand the principles of tooth-borne partial denture design and constru			sign and construct	tion			
Specific Learning Objectives:	Teachers Activities	Learning Resour	rces	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
1.1 Define and explain tooth-	Lecture	Textbooks, Cha	rts and				Quiz
borne partial dentures 1.2 Explain the importance and function of tooth horne	Explain the	Forms, Reading materials.					Tests
partial dentures							Assignment
 1.3 List the various classes of tooth-borne partial dentures e.g. Kennedy and Beckett's classifications 1.4 Describe the component parts of tooth-borne partial dentures and their functions 1.5 Explain the advantages and limitation of tooth-borne partial denture 1.6 Describe the principles of 			<u>8</u> 1				Examination
 tooth-borne partial denture 1.7 Describe the constituents and properties of the materials of the component parts of tooth-borne partial dentures 	1 BOP						
1.8 Demonstrate the designs of tooth-borne partial dentures							

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on given models using the						
principles described in 1.6						
above (Demonstration						
should cover various						
classes)						
1.9 Describe the process of the					P	
construction of various						
classes of tooth-borne						
partial dentures						
1.10 Construct various classes of						
tooth-borne partial	 4h = main = in 1 = a = f %1			1 annliantiana		
Specific Learning Objectives:	Teachers	Use wax process in metal ca	Specific	Toochors	Loorning	Evaluation
Specific Learning Objectives:	Activities	Learning Resources	Learning	Activities	Resources	Evaluation
			Objectives:		itesources	
2.1 Define the term "Lost	Lecture	Textbooks, Charts and				Quiz
Wax" process		Forms, Reading materials.				
Ĩ	Explain the					Tests
2.2 Explain the importance of	concepts covered					
"Lost Wax" process in metal						Assignment
casting						
						Examination
2.3 List the various types of		hV				
waxes used in metal casting						
process						
2.4 Describe the composition						
and properties of the metal						
casting process						
2.5 List the various types of						
investment materials used in						
\checkmark		157				
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metal casting process						
2.6 Describe the composition and properties of investment materials used in metal casting process					DU	
2.7 Describe the principles of "Lost Wax" process in metal casting				AL		
2.8 Prepare WAC pattern of tooth-borne partial dentures			AT .	>		
2.9 Prepare molds of WAX						
pattern of tooth-borne partial						
dentures in preparation for						
metal casting						
2.10 Cast metal for tooth-		SO'				
borne partial dentures						
General Objective: 3.0 Understand	the principles of de	ntal application of metal melt	ting and finishing	g systems	·	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
3.1 Define or explain the	Lecture	Textbooks, Charts and				Quiz
following terms:	Explain the	Forms, Reading materials.				Tests
i. Wax Pattern	concepts covered					
ii. Investing						Assignment
iii. Sprucing	L'					Examination
iv. Burnout Temperature						Examination
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PROGRAMME: HND De	ntal Technology			
COURSE TITLE: Orthod	lontic Technology I			
COURSE CODE: DTE 32	22			
	Lecture:- 1 Hr	Tutorial:-	Practical:- 3 Hi	rs Total:- 4Hrs/Wk (60Hrs/Sem)
REDIT UNITS: 2 CU	· · · · · · · · · · · · · · · · · · ·			
UAL: This course is des	igned to provide students w	th basic knowledge of orthodontic	s c	<u> </u>
ENERAL OBJECTIVES	S: On completion of the co	urse, the student should be able to:		
0 Understand the se	lection or removable ort	hodontic appliances and types of	f mchorage used in o	orthodontics
ROGRAMME: HND Der OURSE TITLE: Orthod	ntal Technology	Course	Code: DTE 322	Contact Hours: 4Hrs/Wk (60Hrs/Sem)
OURSE SPECIFICATIO	M Theoretical content			Practical Content:
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eneral Objective. 1.0 Onderstand	the history and esse	entials of orthodontics			C I	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
.1 Define Orthodontics	Lecture	Textbooks, Charts and			N N	Quiz
.2 Narrate the relevance of	_	Forms, Reading				_
orthodontic treatment in	Explain the	materials.				Tests
contemporary dental	concepts covered					Assignment
practice						Assignment
.3 Outline the history of				\sim		Examination
Urthodontics				7		2/summut/011
4 List the goals of						
Orthodontic treatment						
5 Classify Orthodontic						
appliances						
7 Define mel ecclusion			Y			
2. Charify and a shoring						
0 Produce Orthodoptic models						
to reflect verious classes of						
mal occlusion						
0 Define pressure in relation		\mathbf{A}				
to Orthodontics						
1 Explain the effects of						
pressure from Orthodontics						
appliances e.g. Orthodontics						
appliance						
2 Describe the aetiology of						
bones in relation to oral						
appliances e.g. Orthodontics						
appliances	K -					
3 Define Orthodontic model						

 1.14 State the significance of models in Orthodontic treatment 1.15 Describe Orthodontics model making in its trimming 1.16 Produce and trim Orthodontics models 						
General Objective: 2.0 Know the 1 Specific Learning Objectives:	nusculature, anatom Teachers Activities	Learning Resources	th regions associat Specific Learning	ed with myotune Teachers Activities	Lional applian Learning Resources	Evaluation
 2.1 Define myofunctional appliances 2.2 List myofunctional appliance and their uses 2.3 List the muscles of mastication 2.4 List the muscles of facial expression 2.5 Identify the muscles of mastication and facial expressions in relation to myofunctional appliances 2.6 Describe the aetiology of bone growth in relation to myofunctional appliances in 	Lecture Explain the concepts covered	Textbooks, Charts and Forms, Reading materials				Quiz Tests Assignment Examination
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the following areas:						Ý Ý
i. The maxilla (palate)						
11. The mandibles				×	$\langle \rangle$	
2.7 Describe the principles						
and procedures for the					>	
construction of						
myofunctional appliances						
ing of an eutonian applicances						
2.8 Construct myofunctional						
appliances						
General Objective: 3.0 Know the p	principles of screw, s	spring and myofunctiona	al appliances			
Specific Learning Objectives:	Teachers	Learning Resources	Specific	Teachers	Learning	Evaluation
	Activities		Learning	Activities	Resources	
21 Define entry and enviro	I a atuma	Tauthoolse Charts and	Objectives:			Oria
3.1 Define screw and spring	Lecture	Textbooks, Charls and				Quiz
in relationship to orthodontic	Explain the	Forms, Reading mater	iais.			Tests
appnances	concepts covered					10303
3.2 List various types of	concepts covered					Assignment
S.2 List various types of		N Y				
Serews		hV				Examination
3.3 List the various types of						
springs						
I B						
3.4 Identify various screws						
and spring in orthodontic						
treatment						
*						
3.5 Explain reason why						
expansion screws are used in						
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orthodontic treatment						
3.6 Identify various expansion screw appliances3.7 Identify various spring incorporated appliances in the treatment of orthodontic patients				ALT	Di	
3.8 Compare and contrast the effects of screw and spring appliances in orthodontics			H			
3.9 Describe the principles and procedures of constructing spring and screw appliances		R				
3.10 Construct various types of screw expansion appliances		P FOr				
3.11 Construct removable spring appliance						
General Objective: 4.0 Understand	the selection or ren	novable orthodontic appliance	es and types of a	nchorage used in	orthodontics	
Specific Learning Objectives:	Teachers Activities	Learning Resources	Specific Learning Objectives:	Teachers Activities	Learning Resources	Evaluation
4.1 Define anchorage in relation to orthodontics4.2 Identify various types of	Lecture Explain the	Textbooks, Charts and Forms, Reading materials.				Quiz
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		LIST OF MINIMUM EQUIPMENT/TOOLS REQUIRED FOR DENTAL TECHNOLO	DGY PROGRAMMES (ND#HNØ)
((1) EQUI	PMENT/TOOLS FOR THE BASIC SCIENCE LABORATORIES	
	I.	General Biology Laboratory	\sim
	II.	General chemistry Laboratory	
	III.	Physics Laboratory	
	IV.	Photography and Audio visual studio	
	V.	Wood and metal workshop	
((2) EQUI	PMENT/TOOLS FOR DENTAL TECHNOLOGY PROFESSIONAL LABORATORIES	
	I.	PROSTHETIC ROOM	
S/No).	Description	Quantity Required
1		Laboratory with fully equipped work benches with refractory top	
		(1.5m x 0.8m) per student titled with following	
a.		Water tap and sink	
b.		Gas, Air, and Electric installation	
c.		Instrument Cabinet and two drawers	20
d.		Illumination Head Jamp	20
e.			
		Single Vacuum Unit	20
f.		Single Vacuum Unit Pack Replacement Unit	20 20
t. g.		Single Vacuum Unit Pack Replacement Unit Laboratory Revolving Chair	20 20 20
f. g. h.		Single Vacuum Unit Pack Replacement Unit Laboratory Revolving Chair Bunsen Burner	20 20 20 20
t. g. h.		Single Vacuum Unit Pack Replacement Unit Laboratory Revolving Chair Bunsen Burner	20 20 20 20
t. g. h.		Single Vacuum Unit Pack Replacement Unit Laboratory Revolving Chair Bunsen Burner 167	20 20 20 20

i. T	Standard Trimming Machine	
11.	PLASTER ROOM	
S/No.	Description	Quantity Required
2.	Plaster room and titled desk or concrete slab should have a floor area of	
	about 2.00 square metre per student. Other fittings in the plaster room	
	room are:	
a.	Adequate water sinks titled to plaster room work benches	Depends on the size of laboratory
b.	Model trimmers	4
с.	Bench Presses	4
d.	Vacuum investor for crown and Bridge	2
е.	Vibrators	3
f.	Sell of flask (acrylic, Maxillo Facial and C and B)	Assorted
g.	Rubber Mallets	2
h.	Plaster shears and saw	10
i.	Turbine chisels-for devesting and cutting models	10
j.	Plaster/Stone Dispensers	4
k.	Sand Blasting Machine	4
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ASTING ROOM		
	Description	Quantity Required
	A set of properly isolated osey-acetyline gas cylinders	A set of 2
	A set of Gas Blow Torch (Assorted)	Assorted
	Pre-Heating furnace	2
	'Solbring' Casting Machine	2
	Induction Casting Machine	2
	Bench top casting machine for flame melting (Centrifugal)	2
	Dipping Bath (Bees as Unit)	2
	Gas Chamber/Cupboard	2
	Gume Extractor	3
	Set of casting rings Nos 11–9 ^x	Assorted
	crucible formers, ceramic crucible	Assorted
	Tongs and asbestors Gloves	4 each
	Storage cabinets	Depends on size of laboratory
	Refractory benches	

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v		
POLISHING ROOM		
5/NO.	Description	Quantity Required
а.	Polishing unit complete with dust extractor and lightning unit	3
b.	High speed Grinder	3
с.	Electrolytic polishing/plating unit	2
d.	Lather polishing Brushes (Assorted) and mops	Assorted
е.	Storage cabinet	Depends on Size of Laboratory
f.	Ultrasonic Cleaning Machine	2
S/No.	Description	Quantity Required
6.	OK	
а.	spot welding and soldering unit	2
b.	Dental Surveyors	3
с.	Articulators – simple hinge, Fixed condylar and anatomical.	4 each
d.	Orthodontic kits, orthodontic wire, cabinet soldering jigs and platforms.	2 each
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LIST OF PARTICIPANTS.

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LIST OF PARTICIPANTS.			
S/N	NAME	ADDRESS	
1.	Paul Anche	Representative Registrar Dental Technologists Registration	
		Board Nigeria, Abuja	
		Department of Department of Dental & Maxillo-facial Surgery	
		National Hospital Abuja.	
2.	Uchechi Nwamarah	Department of Dental Technology, Shehu Idris College of	
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6.	Dominic Kudan	National Board for Technical Education, Kaduna.	
7.	Mohd Maiwada 🔥 🔨	National Board for Technical Education, Kaduna.	
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9.	Helen Oduntan	National Board for Technical Education, Kaduna.	

