

MYMENSINGH POLYTECHNIC INSTITUTE
ELECTROMEDICAL TECHNOLOGY
Out Line Plan of Teaching 5th Sem Student

SEMESTER PLAN
Subject: LASER in Medical Field (68655)

T P C
2 3 3

Week	Theory			Practical	
	Content (Specific Objective)	Activity		Content(Practical Job no)	Activity
		Class Test	Learning Materials		
1	Understand the Physics of Laser (1.1---1.5)		Ref. books, white board , marker, flow chart	Introducing to different equipment which is required to perform practical experiment.	
2	Understand Energy Distribution & LASER action (2.1---2.7)			Job no:- 1(Basic Working Principle Of Argon Laser)	Schematic Diagram Of Argon Laser
3	Understand Laser Resonators & Modes (3.1---3.6)			“	“
4	Understand Laser Band width (3.7---3.8, 4.1---4.3)	CT-1		Job no:-2(Principle Of Pulsed Ruby Laser)	Pulsed Ruby Laser Machine
5	Understand the pulsed Ruby & ND-YAG LASER (4.4, 5.1—5.3)			Job no:-3(Working Principle Of ND-AG Laser)	ND-YAG Laser
6	Understand the Helium neon LASER (5.4---5.5, 6.1—6.4)	QT-1		Job no:4(Working Principle Of Helium-Neon Laser)	Helium – Neon Laser Machine
7	Understand the Argon LASER (6.6--6.7, 7.1---7.3)			Review Job no:-1	
8	(7.4---7.8)			Review Job no:-2	
9	Midterm Examination				
10	Understand the CO2 LASER (8.1---8.5)			Job no:-5(Basic Working Principle of Argon Ion Laser Photocoagulator)	Argon Laser Machine ,Glass Light, Fiber
11	Understand Excimer LASER (9.1--9.4)			Job no:-6 (Operation of CO2 Laser	CO2 Laser Machine
12	Understand the LASER Therapy & LASER Applications (10.1---10.4)	CT-2		Review Job no:-6	
13	10.5---10.6			Review Job no:-3	
14	Understand the Medical LASER Safety (11.1---11.6)	QT-2		Review Job no:-4	
15	Revision			Review Job no:-5	
16	Revision				

Teacher's name: **MD. Mahamudul Hasan Sumon**
 Designation: Junior Instructor
 Department: Electromedical

MYMENSINGH POLYTECHNIC INSTITUTE
ELECTROMEDICAL TECHNOLOGY
Out Line Plan of Teaching 5th Sem Student

SEMESTER PLAN PRESENTATION
Subject: Dental Equipment (68652)

T P C
2 3 3

Week	Theory			Practical	
	Content (Specific Objective)	Activity		Content(Practical Job no)	Activity
		Class Test	Learning Materials		
1	Understand The Concept of dentistry(1.1---1.5)		Ref. books, white board , marker, flow chart		
2	The concept of Dental office design(2.1---2.6)			Job no:-1 (Identify the different parts of a Hand cutting Instrument)	Hand cutting Instrument
3	Understand the basic dental equipment(3.1---3.6)	CT-1		Job no:- 2 (Explain the basic function of Dental Equipment)	Dental Equipment
4	Understand the rotary instrument(4.1----4.8)			Job no :- 3 (Operation of the High Velocity Evacuation System)	HVS
5	Understand instrument sharpening(5.1---5.6)	QT-1		Job no:- 4 (Studying the Construction and the Operation of Dental X-Ray machine)	Dental X-ray machine
6	Understand dental hand pieces(6.1---6.9)			Job no:- 5 (Operation of Ultrasonic scaling Device)	Ultrasonic scaling device
7	Review				
8	Review				
9	Midterm Examination				
10	Understand high velocity evacuation technique(HVE) (7.1---7.6)			Job no:-6(Studying the Operation Of Dental Chair)	Dental Chair
11	Understand the tooth extraction techniques(8.1---8.5)			Job no:-7(Studying The Operation Of Pneumatic rotary Dental Hand Pieces	Pneumatic rotary Dental Hand Pieces
12	Understand The sterilization of dental equipment (9.1---9.5)	CT-2		Revision Practical Job	
13	(9.6---9.7) & Understand the dental X-ray Machines (10.1---10.2)			"	
14	Understand dental X-ray Machines (10.2---10.5)			"	
15	Understand dental surgery unit (11.1---11.4)	QT-2		"	
16	Review			"	

Teacher's name: **Engr. Eidris Ali**
 Designation: **Instructor & Head of the Dept.**
 Department: **Electromedical**

MYMENSINGH POLYTECHNIC INSTITUTE
ELECTRO - MEDICAL TECHNOLOGY
Out Line Plan of Teaching 5th Semester Student

SEMESTER PLAN PRESENTATION

Subject :Bio Medical Instrumentation & Mesurements

T P C

3 3 4

We ek	Theory		Practical		
	Content (Specific Objective)	Activity		Content (Practical Job no)	Acti ty
		Class Test	Learning Materials		
1	Understand qualities of measurements(1.1-1.4)		Ref. books, white board marker, flow chart	Measure voltage ,current and resistance using a multimeter.	
2	Understand qualities of measurements.(1.5-1.8)			Measure voltage, time period and frequency using a CRO.	
3	Understand the basic features of analogue meters(2.1-2.4)			Measure the rise, fall and delay time using a CRO.	
4	Understand the basic features of analogue meters (2.5-2.7)	CT-1		Measure the frequency using digital frequency counter / meter.	
5	Understand the basic features of voltmeter (3.1-.3.4)			Test the operation of a function generator.	
6	Understand the basic features of voltmeter(3.5-3.8)	QT-1		Measure the inductance with an AC bridge	
7	Understand the features of digital display system (4.1-4.5)			Measure the resistance, inductance and capacitance using RLC bridge	
8	Understand the features of digital instruments.(5.1-5.4)			Measure the Q of a coil with a Q-meter	
9	Understand the features of oscilloscope(6.1-6-6.4)	QT-2		Test the transistor using semiconductor tester.	
10	Understand the features of oscilloscope (6.5-6.9)			Test the diode, SCR and FET using semiconductor tester	
11	Understand the features of signal generator(7.1-7.6)			Study the operation of a digital display unit.	
12	Understand the Optoelectronic measurement.(8.1-8.6)	CT-2		Review	
13	Understand the features of Impedance Bridge(9.1-9.4)			Review	
14	Understand the features of Impedance Bridge(9.5-9.7)			Review	
15	Understand the features of special measuring instruments(10.1-10.5)			Review	
16	Understand the features of special measuring instruments (10.6-10.8)			Review	

Teacher's name: MD. Aminul Hoque
Designation: Junior Instructor
Department: Electromedical

MYMENSINGH POLYTECHNIC INSTITUTE

ELECTRO-MEDICAL TECHNOLOGY

Out Line plan of Teaching 5th Sem Student

SEMESTER PLAN PRESENTATION

T P C

Subject : Anesthesia and Respiratory Equipment (8653)

3 3 4

Week	Theory		Practical		
	Content (Specific Objective)	Activity		Content (Practical job no)	Activity
		CT	Learning materials		
1	Understand Medical Gas Supply (1.1-1.8)		Ref. books, white board, marker, flow chart, vedio contant , etc .	Introducing to different equipment which is required to perform practical experiment .	Ref. books , methodology , viva , job sheet .
2	Understand The Respiratory System (2.1-2.7)			Job no:- 1 (Measure The Respiration Rate Using Pneumograph)	Spirometer
3	Understand The Measurement of Respiration (3.1-3.5)			"	
4	Understand The Pulmonary function Analyzers (4.1-4.5)	QT -1		Job no:- 2 (Study Operation Of Spirometer)	Spirometer
5	(4.6-4.9)			Job no:- 3 (Study the Operation of Blood Gas Analyzer)	Blood Gas Analyzer
6	Understand Inhalators (5.1-5.5)			Job no:- 4 (Study The Operation Of Nebulyzer)	Nebulyzer
7	Understand The Ventilators (6.1-6.7)	CT-1		"	
8	Understand Respirator (7.1-7.3)			"	
9	Understand The Anesthesia Machine (8.1-8.3)			Job no:- 5 (Study The Operation Of Vaporizer)	Variable by pass Vaporizer
10	(8.4-8.7)			Job no:- 6 (Study The Operation Of Anesthesia Machine)	Anesthesia Machine
11	Understand The Patient Safety & Monitoring in Anesthesia (9.1-9.5)	QT-2		"	
12	Understand The Respiratory Therapy Equipment (10.1-10.3)			Job no :- 7 (Study The Operation Of Respiratory Therapy Equipment)	
13	(10.4-10.6)			Review Classes	
14	Revision	CT-2		"	
15	"			"	
16	"			"	