



**INTEGRAL UNIVERSITY, LUCKNOW**  
**INTEGRAL INSTITUTE OF ALLIED HEALTH SCIENCES & RESEARCH**

**DEPARTMENT OF PARAMEDICAL SCIENCES**

**BACHELOR OF SCIENCE IN ANESTHESIOLOGY  
AND INTENSIVE CARE TECHNOLOGY  
(B. Sc. AICT)**

**SYLLABUS**

**YEAR/ SEMESTER: III/V**



Integral University, Lucknow  
Department of Paramedical Sciences  
Study and Evaluation Scheme

Program: BAICT

Semester-V

S. N.	Course code	Course Title	Type of Paper	Period Per hr/week/sem			Evaluation Scheme				Sub. Total	Credit	Total Credits
				L	T	P	CT	TA	Total	ESE			
<b>THEORIES</b>													
1	AT301	Anesthesia for Patient with Medical Disorder	Core	2	1	0	40	20	60	40	100	2:1:0	3
2	AT302	Central Sterile Supply Department (CSSD)Procedures	Core	2	1	0	40	20	60	40	100	2:1:0	3
3	AT303	Basic Intensive Care	Core	3	1	0	40	20	60	40	100	3:1:0	4
4	AT304	Advance Anesthesia Technique	Core	3	1	0	40	20	60	40	100	3:1:0	4
5	AT305	Seminar	Core	3	1	0	40	20	60	40	100	3:1:0	4
<b>PRACTICAL</b>													
1	AT306	Central Sterile Supply Department (CSSD)Procedures Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
2	AT307	Advance Anesthesia Technique Lab	Core	0	0	2	40	20	60	40	100	0:0:1	1
4	AT308	OT Posting	Core	0	0	2	40	20	60	40	100	0:0:1	1
<b>Total</b>				<b>13</b>	<b>06</b>	<b>06</b>	<b>320</b>	<b>160</b>	<b>480</b>	<b>320</b>	<b>800</b>	<b>21</b>	<b>21</b>

S. N.	Course code	Course Title	Type of Paper	Attributes							United Nation Sustainable Development Goal (SDGs)
				Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
<b>THEORIES</b>											
1	AT301	Anesthesia for Patient with Medical Disorder	Core	√	√	√			√	√	3,4
2	AT302	Central Sterile Supply Department (CSSD)Procedures	Core	√	√	√			√	√	3,4
3	AT303	Basic Intensive Care	Core	√	√	√			√	√	3,4
4	AT304	Advance Anesthesia Technique	Core	√	√	√			√	√	3,4
5	AT305	Seminar	Core	√	√	√			√	√	3,4
<b>PRACTICAL</b>											
1	AT306	Central Sterile Supply Department (CSSD)Procedures Lab	Core	√	√	√			√	√	3,4
2	AT307	Advance Anesthesia Technique Lab	Core	√	√	√			√	√	3,4
3	AT308	OT Posting	Core	√	√	√			√	√	3,4

**L:** Lecture      **T:** Tutorials      **P:** Practical      **CT:** Class Test      **TA:** Teacher Assessment      **ESE:** End Semester Examination,  
**AE=** Ability Enhancement, **DSE-** Discipline Specific Elective, **Sessional Total:** Class Test + Teacher Assessment      **Subject Total:** Sessional Total + End Semester Examination (ESE)



## Integral University, Lucknow

Effective from Session: 2024-25

Course Code	AT301	Title of the Course	ANESTHESIA FOR PATIENTS WITH MEDICAL DISORDERS	L	T	P	C
Year	III	Semester	V	2	1	0	3
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	Acquire the knowledge of concepts of cell injury & changes produced thereby in different tissues & organs-; capacity of the body in healing process. Recall the etiopathogenesis, the pathological effects & the clinico-pathological correlation of common infections & noninfectious diseases						

Course Outcomes	
CO1	Students able to understand the Hypertension and Diabetes.
CO2	Students able to understand Respiratory Diseases.
CO3	Students able to understand Coronary Artery diseases.
CO4	Students able to understand about Thyroid Disorder and Obesity.
CO5	Students able to learn the Renal Failure.

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	<b>HYPERTENSION AND DIABETES</b>	<b>Hypertension</b> -Hypertension-commonly used antihypertensive - losartan, amlodipine, telmisartan, atenolol, methods to reduce hypertension intraoperatively, complications of intraoperative hypertension. <b>Diabetes Mellitus Diabetes</b> -insulin preparations, methods to reduce blood sugar levels, complications of uncontrolled diabetes intraoperative.	6	CO1
2	<b>RESPIRATORY DISEASES</b>	Respiratory diseases, epilepsy, anemia- Bronchial asthma/COPD-complications and its management intraoperative, methods to avoid precipitating bronchospasm , Epilepsy-anesthesia drugs precipitating an epileptic attack, drugs used for treatment , Anemia-complications under anesthesia	6	CO2
3	<b>CORONARY ARTERY DISEASE</b>	Coronary artery diseases, thyroid diseases- Coronary artery disease-risk factors for having an myocardial/infarction under anesthesia, drugs used in their management, complications of ischemic heart disease patient undergoing non cardiac surgery	6	CO3
4	<b>THYROID DISORDER AND OBESITY</b>	Thyroid disorders-causes of hyper and hypothyroidism, challenges of anaesthetizing a thyroid patient, thyroid storm and its management, complications after thyroidectomy Obesity, Renal and Liver Failure-Obesity-challenges of anaesthetizing an obese patient.	6	CO4
5	<b>RENAL FAILURE</b>	Renal failure-anesthetic challenges in renal failure patient, intraoperative complications in renal failure patients and its management.,important anesthetic challenges during renal transplant , Jaundice-intraoperative complications in a liver failure patient	6	CO5

**Reference Books:**

1. Comparative pharmacology for anaesthetists- Vipin dhama.
2. Miller anaesthesia
3. Clinical Anaesthesiology – 6 th edition Morgan

**e-Learning Source:**

1. <https://www.youtube.com/watch?v=MnVgGTv6EW0>
2. <https://www.youtube.com/watch?v=sBoRKzc7pdY>
3. <https://www.youtube.com/watch?v=AuTlwFreglc>
4. <https://www.youtube.com/watch?v=S1kdYd4JGbg>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	-	3	-	2	-	-	1	2	-	1	3	-	1	1	-
CO2	3	3	-	2	-	2	-	-	2	3	-	1	3	-	1	1	-
CO3	3	3	-	3	-	2	-	-	1	2	-	1	3	-	2	2	-
CO4	3	3	-	3	-	2	-	-	1	2	-	1	3	-	1	1	-
CO5	3	3	-	2	-	2	-	-	1	3	-	1	3	-	1	1	-

**1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation**

**Attributes & SDGs**

Course Code	Course Title	Attributes							SDGs No.
AT301	ANESTHESIA FOR PATIENTS WITH MEDICAL DISORDERS	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4
		√	√	√			√	√	



**Integral University, Lucknow**

**Effective from Session: 2024-25**

<b>Course Code</b>	<b>AT302</b>	<b>Title of the Course</b>	<b>CENTRAL STERILE SUPPLY DEPARTMENT(CSSD)PROCEDURES</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Year</b>	<b>III</b>	<b>Semester</b>	<b>V</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>
<b>Pre-Requisite</b>	<b>Nil</b>	<b>Co-requisite</b>	<b>Nil</b>				
<b>Course Objectives</b>	At the end of the course, the candidate will have sound knowledge of the sterilization and techniques used in sterilization, surgical instruments, criteria for purchase and maintenance, Quality assurance programme, Use of disinfections sorting and classification of equipment for cleansing purposes, Cleaning process- Use of detergents, Special precautions while handling instruments linen and other items used for patients with HIV, HBV,HCV.						

<b>Course Outcomes</b>	
<b>CO1</b>	Students able to understand Sterilization and Techniques of sterilization.
<b>CO2</b>	
<b>CO3</b>	Students able to understand about surgical instrument and maintenance
<b>CO4</b>	Students able to understand use of disinfectant.
<b>CO5</b>	Students able to understand use of detergent and cleaning process.

<b>Unit No.</b>	<b>Title of the Unit</b>	<b>Content of Unit</b>	<b>Contact Hrs.</b>	<b>Mapped CO</b>
1	<b>STRILIZATION AND TECHNIQUES</b>	General observations and principle of sterilization, Moist heat Sterilization, Dry heat sterilization, E2O gas sterilization, H2O2 gas plasma vapor sterilization. Calculation of capacity requirement of sterilizer.	6	CO1
2		Sterilize operation, Sterilize basic trouble shooting methods, Sterilization recommended practices or Flash Sterilization, Cell back system in case of detection of Failure. Complete decontamination technique, Confirmation of cleaning process, Monitoring Techniques, Quality Assurance program.	6	CO2
3	<b>SURGICAL INSTRUMENT</b>	Surgical Instruments, Criteria for Purchase and Maintenance, Preparation and Supplies for Terminal Sterilization, Endoscopes and its sterilization, Surgical Procedures.	6	CO3
4	<b>DISINFECTION USE</b>	Collection of used items from user area, reception protective clothing and disinfections sage guards, Use of disinfections sorting and classification of equipment for cleansing purposes, sharps, blunt lighted etc. contaminated high risk baby care- delicate instruments or hot care instruments.	6	CO4
5	<b>CLEANING PROCESS</b>	Cleaning process- Use of detergents, Mechanical cleaning apparatus, Cleaning instruments, cleaning jars, receivers bowls etc. trays, basins and similar hand are utensils, Cleaning of catheters and tubing, cleaning glass ware, cleaning syringes and needles. Special precautions while handling instruments linen and other items used for patients with HIV, HBV,HCV.	6	CO5

**Reference Books:**

1. Know your instruments Losper Joan M
- 2.

**e-Learning Source:**

1. <https://www.youtube.com/watch?v=LEiN-pkYeRs>
2. <https://www.youtube.com/watch?v=keXNin9IJSE>
3. [https://www.youtube.com/watch?v=k\\_lxtI\\_9PMA](https://www.youtube.com/watch?v=k_lxtI_9PMA)
4. <https://www.youtube.com/watch?v=kJ3VsW4gnO0>

<b>Course Articulation Matrix: (Mapping of COs with POs and PSOs)</b>																		
<b>PO-PSO CO</b>	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
<b>CO1</b>	3	3	-	1	-	1	-	-	1	1	-	1	2	-	1	1	-	3
<b>CO2</b>	2	3	-	2	-	2	-	-	-	1	-	2	3	-	2	2	-	2
<b>CO3</b>	3	3	-	1	-	1	-	-	1	1	-	1	2	-	1	1	-	3
<b>CO4</b>	2	3	-	1	-	2	-	-	-	1	-	2	2	-	1	1	-	2
<b>CO5</b>	2	3	-	1	-	2	-	-	-	1	-	2	3	-	1	1	-	2

**1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation**

**Attributes & SDGs**

<b>Course Code</b>	<b>Course Title</b>	<b>Attributes</b>							<b>SDGs No.</b>
AT302	CENTRAL STERILE SUPPLY DEPARTMENT(CSSD) PROCEDURES	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	3,4
		√	√	√	√		√	√	



**Integral University, Lucknow**

<b>Effective from Session: 2024-25</b>							
<b>Course Code</b>	<b>AT303</b>	<b>Title of the Course</b>	<b>BASIC INTENSIVE CARE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Year</b>	<b>III</b>	<b>Semester</b>	<b>V</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Pre-Requisite</b>	<b>Nil</b>	<b>Co-requisite</b>	<b>Nil</b>				
<b>Course Objectives</b>	This course deals with fundamentals of basic intensive care.						

<b>Course Outcomes:</b> After the successful course completion, learners will develop following attributes:	
<b>CO1</b>	Students will be able to learn about respirator system.
<b>CO2</b>	Students will be able to learn about cardiovascular system.
<b>CO3</b>	Students will be able to learn about CNS.
<b>CO4</b>	Students will be able to learn about nutritional monitoring.
<b>CO5</b>	Students will be able to learn about care and maintenance of Intensive care unit..

<b>Unit No.</b>	<b>Title of the Unit</b>	<b>Content of Unit</b>	<b>Contact Hrs.</b>	<b>Mapped CO</b>
1	<b>RESPIRATORY SYSTEM</b>	Monitoring lung and chest wall mechanics , Compliance , Resistance , Pressures , Auto PEEP Volumes, Monitoring muscle strength, work of breathing, Maximum inspiratory and expiratory pressures, Monitoring patient ventilator system, Graphics monitoring ,Bedside PFT	8	CO1
2	<b>CARDIOVASCULAR SYSTEM</b>	Assessment of Preload responsiveness static and dynamic parameters, Basic Echocardiography in ICU/ Ultrasound in Critical Care, Defibrillator and Cardio version ,PICCO ,Monitoring tissue perfusion ,Pulmonary artery catheters ,Temporary pacemaker	8	CO2
3	<b>CNS</b>	Monitoring brain stem function Unit 2: Sedation and analgesia scoring	8	CO3
4	<b>NUTRITIONAL MONITORING</b>	Functional nutritional assessment (history and physical examination) ,Metabolic assessment ,Estimating nutritional requirements	8	CO4
5	<b>CARE AND MAINTAINACE OF ICU</b>	Mechanical Ventilators & Non-invasive ventilators, Pumps: Infusion, syringe ,Monitors: Stand-alone & multi-parameter, Cardiac Output monitors. ,ECG machine Unit 5: ABG machine ,Defibrillator ,Ultrasound machine ,Bronchoscope	8	CO5

<b>Reference Books:</b>	
1. Egan's Fundamentals of Respiratory Care – Robert L. Wikins, James K Stoller,	
2. The ICU Book – Paul L Marino (Lippincott, Williams & Wilkins)	
3. Practical Methods for Respiratory Care – Raymond Sibberson (Mosby)	
4. Critical Care Secrets: Parsons, Wiener – Kronish, Jaypee Brothers	
<b>e-Learning Source:</b>	
1. <a href="https://www.youtube.com/watch?v=-tvDLg-5Qv8">https://www.youtube.com/watch?v=-tvDLg-5Qv8</a>	
2. <a href="https://www.youtube.com/watch?v=XfVqnlkU3ZY">https://www.youtube.com/watch?v=XfVqnlkU3ZY</a>	
3. <a href="https://www.youtube.com/watch?v=vGh7VVk9Oeg">https://www.youtube.com/watch?v=vGh7VVk9Oeg</a>	
4. <a href="https://www.youtube.com/watch?v=Wu18mpl_62s">https://www.youtube.com/watch?v=Wu18mpl_62s</a>	

<b>Course Articulation Matrix: (Mapping of COs with POs and PSOs)</b>																	
<b>PO-PSO CO</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	<b>PO11</b>	<b>PO12</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>	<b>PSO4</b>	<b>PSO5</b>
<b>CO1</b>	1	3	2	2	-	-	-	1	2	1	-	2	2	1	-	1	-
<b>CO2</b>	1	3	1	3	-	-	-	2	3	-	-	3	3	2	-	2	-
<b>CO3</b>	1	3	1	2	-	-	-	1	2	2	-	2	3	1	-	1	-
<b>CO4</b>	1	3	1	2	-	-	-	1	3	-	-	3	2	1	-	1	-
<b>CO5</b>	1	3	1	2	-	-	-	1	2	1	-	2	2	1	-	1	-

**1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation**  
Attributes & SDGs

<b>Course Code</b>	<b>Course Title</b>	<b>Attributes</b>							<b>SDGs No.</b>
<b>AT303</b>	<b>BASIC INTENSIVE CARE</b>	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
		√	√	√	√		√	√	<b>3,4</b>



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<b>Effective from Session: 2024-25</b>							
<b>Course Code</b>	<b>AT304</b>	<b>Title of the Course</b>	<b>ADVANCE ANESTHESIA TECHNIQUE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Year</b>	<b>III</b>	<b>Semester</b>	<b>V</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Pre-Requisite</b>	<b>Nil</b>	<b>Co-requisite</b>	<b>Nil</b>				
<b>Course Objectives</b>	The course will provide training in basic type of anesthetic and anesthetic procedure.						

<b>Course Outcomes:</b> After the successful course completion, learners will develop following attributes:	
<b>CO1</b>	Student will able to learn about neuro anaesthesia .
<b>CO2</b>	Student will able to learn about obstetric anaesthesia.
<b>CO3</b>	Student will able to learn about pediatric anaesthesia.
<b>CO4</b>	Student will able to learn about cardiac anaesthesia .
<b>CO5</b>	Student will able to learn about geriatric anaesthesia .

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	<b>NEURO ANAESTHESIA</b>	Glasgow coma scale, Premedication, Special investigation - CT, Angiography and MRI , Checklist , Induction of a patient, Reinforced Endotracheal tubes , Positioning in neuro surgery , Intracranial pressure (ICP) , Air embolism ,Reversal of the patient ,Transferring to I.C.U. / Ward	8	CO1
2	<b>OBSTETRIC ANAESTHESIA</b>	Differences between a pregnant and a normal lady, Risks for anaesthesia. ,Precautions to be taken , Check list, Regional vs general anaesthesia, Induction / maintenance and recovery , Resuscitation of the newborn, apgar score , Reversal and extubation , Emergencies - manual removal of placenta , Antepartum hemorrhage (APH) , Postpartum hemorrhage (PPH) ▪ Ruptured uterus , Ectopic Pregnanc	8	CO2
3	<b>PEDIATRIC ANAESTHESIA</b>	Theatre setting , Check list , Premedication - modes , Induction ,Intubation - Securing the EIT, Reversal & extubation – Problems , Transferring / ICU management , Pain management.	8	CO3
4	<b>CARDIAC ANAESTHESIA</b>	NYHA classification, Arrhythmias, Angina, Dyspnoea, Special investigations ,Echocardiography, Angiography,Premedication, Setting up of monitoring system , Monitoring - invasive and non –invasive, Getting ready for the case, Induction of cardiac patient, precautions to be taken , Cardiopulmonary bypass , Weaning of CPB , Transferring the patient to intensive care unit (ICU), Care to be taken,ICU management.,Chest tube management	8	CO4
5	<b>GERIATRIC ANAESTHESIA</b>	Physiological changes, Diseases of aging, Nervous system, Geriatric pharmacodynamics / pharmacokinetics ,Postoperative nervous system dysfunction	8	CO5

**Reference Books:**

1. Ajay Yadav Short Textbook of Anaesthesia Jaypee
2. Anshul Jain Essentials of Anaesthesia& Critical Care Jaypee
3. Principles of anaesthesia equipment's – Yasodhanandha arit
- 4.The Anaesthesia Technologist's Manual by Emily S Guimaraes, Matthew Davis, Jeffrey R Kirsch, Glenn Woodworth
- 5.Introduction to the Surgery by Marketa Duskova

**e-Learning Source:**

1. <https://www.youtube.com/watch?v=aXt1DbdeBXk>
2. <https://www.youtube.com/watch?v=esxafXkG6zk>
3. <https://www.youtube.com/watch?v=GDcoeWBxOjc>
4. <https://www.youtube.com/watch?v=vAL8H3idU6k>

PO-PSO CO	Course Articulation Matrix: (Mapping of COs with POs and PSOs)																
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	2	3	-	-	-	-	-	-	-	-	-	1	3	-	1	-	2
CO2	3	3	-	-	-	2	-	-	-	-	-	-	3	3	2	3	3
CO3	2	3	-	-	-	2	-	-	-	-	-	1	3	2	1	3	2
CO4	3	3	-	-	-	-	-	-	-	-	-	-	2	3	2	2	3
CO5	3	3	-	-	-	3	-	1	-	-	-	-	3	3	2	3	3

**2- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation**  
Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
AT304	ADVANCE ANESTHESIA TECHNIQUE	√	√	√			√	√	3,4



**Integral University, Lucknow**

<b>Effective from Session: 2023-2024</b>										
<b>Course Code</b>	<b>AT305</b>	<b>Title of the Course</b>	<b>SEMINAR</b>				<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Year</b>	<b>III</b>	<b>Semester</b>	<b>V</b>				<b>3</b>	<b>1</b>	<b>0</b>	<b>4</b>
<b>Pre-Requisite</b>	<b>Nil</b>	<b>Co-requisite</b>	<b>Nil</b>							
<b>Course Objectives</b>										

<b>Course Outcomes</b>	
<b>CO1</b>	Student will able to learn about anesthesia for patient with medical disorder.
<b>CO2</b>	Student will able to learn about central sterile supply department (cssd) procedures.
<b>CO3</b>	Student will able to learn about basic intensive care.
<b>CO4</b>	Student will able to learn about advance anesthesia technique.
<b>CO5</b>	Student will able to learn about anesthesia for patient with medical disorder.

<b>Unit No.</b>	<b>Title of the Unit</b>	<b>Content of Unit</b>	<b>Contact Hrs.</b>	<b>Mapped CO</b>
1.	<b>ANESTHESIA FOR PATIENT WITH MEDICAL DISORDER</b>	Seminar Topic will be given based on courses and will be decided by course teacher.	6	CO1
2.	<b>CENTRAL STERILE SUPPLY DEPARTMENT (CSSD)PROCEDURES</b>	Seminar Topic will be given based on courses and will be decided by course teacher.	6	CO2
3.	<b>BASIC INTENSIVE CARE</b>	Seminar Topic will be given based on courses and will be decided by course teacher.	6	CO3
4.	<b>ADVANCE ANESTHESIA TECHNIQUE</b>	Seminar Topic will be given based on courses and will be decided by course teacher.	6	CO4
5.	<b>ANESTHESIA FOR PATIENT WITH MEDICAL DISORDER</b>	Seminar Topic will be given based on courses and will be decided by course teacher.	6	CO5

**Reference Books:**

1. Ajay Yadav Short Textbook of Anaesthesia Jaypee
2. Anshul Jain Essentials of Anaesthesia & Critical Care Jaypee
3. Principles of anaesthesia equipment's – Yasodhanandha arit
4. The Anaesthesia Technologist's Manual by Emily S Guimaraes, Matthew Davis, Jeffrey R Kirsch, Glenn Woodworth
5. Introduction to the Surgery by Marketa Duskova

**e-Learning Source:**

1. <https://www.youtube.com/watch?v=aXt1DbdeBXk>
2. <https://www.youtube.com/watch?v=esxafXkG6zk>
3. <https://www.youtube.com/watch?v=GDcoewBxOjc>
4. <https://www.youtube.com/watch?v=vAL8H3idU6k>

<b>Course Articulation Matrix: (Mapping of COs with POs and PSOs)</b>																	
<b>PO-PSO CO</b>	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
<b>CO1</b>	3	3	-	1	-	1	-	-	1	1	-	1	2	-	1	1	-
<b>CO2</b>	2	3	-	2	-	2	-	-	-	1	-	2	3	-	2	2	-
<b>CO3</b>	3	3	-	1	-	1	-	-	1	1	-	1	2	-	1	1	-
<b>CO4</b>	2	3	-	1	-	2	-	-	-	1	-	2	2	-	1	1	-
<b>CO5</b>	2	3	-	1	-	2	-	-	-	1	-	2	3	-	1	1	-

**1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation**  
**Attributes & SDGs**

<b>Course Code</b>	<b>Course Title</b>	<b>Attributes</b>							<b>SDGs No.</b>
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
AT305	SEMINAR	√	√	√			√	√	3,4



## Integral University, Lucknow

<b>Effective from Session: 2023-24</b>							
Course Code	AT306	Title of the Course	CENTRAL STERILE SUPPLY DEPARTMENT(CSSD)PROCEDURES LAB	L	T	P	C
Year	III	Semester	V	0	0	2	1
Pre-Requisite	Nil	Co-requisite	Nil				
Course Objectives	The student will be able to demonstrate the practical knowledge in cssd.						

Course Outcomes	
CO1	To understand about the basic of pathological practical and also know the how to handle the equipment's.
CO2	
CO3	
CO4	
CO5	
To understand about the basic of Quality Assurance Monitoring system.	

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1	<b>INVENTORY MAINTAINENCE AND STRILIZATION</b>	<ol style="list-style-type: none"> <li>How to maintain perfect inventory,</li> <li>Sterilization operation and monitoring.</li> <li>Basic trouble shooting methods.</li> <li>Practical knowledge on sterile storage and distribution, System of documentation, Sterilizer validation, Inventory management of surgical instruments.</li> </ol>	20	CO1-5
2	<b>QUALITY ASSURANCE</b>	Practical knowledge of quality assurance monitoring system, Physical/ chemical/ Biological indicators- Monitoring and record maintenance.	10	CO1-5

Reference Books:	
1.	Text book of Pathology - by Harsh Mohan
2.	Textbook of Pathology By Boyd
3.	General Pathology – by Bhende
4.	Pathologic basis of diseases by Cotran, Kumar, Robbins
5.	Textbook of Parasitology- K. D. Chatterjee (12 <sup>th</sup> Ed.)
6.	Text Book of Microbiology – Panikkar (9 <sup>th</sup> Ed.)
7.	Essentials of Medical Microbiology-Sastry Apurba Shankar (1 <sup>st</sup> Ed.)
8.	Textbook of Microbiology –P. Chakraborty

e-Learning Source:	
1.	<a href="https://www.youtube.com/watch?v=LEiN-pkYeRs">https://www.youtube.com/watch?v=LEiN-pkYeRs</a>
2.	<a href="https://www.youtube.com/watch?v=keXNin9IJSE">https://www.youtube.com/watch?v=keXNin9IJSE</a>
3.	<a href="https://www.youtube.com/watch?v=k_lxtf_9PMA">https://www.youtube.com/watch?v=k_lxtf_9PMA</a>
4.	<a href="https://www.youtube.com/watch?v=kJ3VsW4gnO0">https://www.youtube.com/watch?v=kJ3VsW4gnO0</a>
5.	<a href="https://www.youtube.com/watch?v=LEiN-pkYeRs">https://www.youtube.com/watch?v=LEiN-pkYeRs</a>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
	CO1	1	3	1	2	-	-	-	1	2	-	-	2	-	1	-	1
CO2	1	3	1	3	-	-	-	1	3	-	-	3	-	2	-	2	-
CO3	1	3	1	2	-	-	-	1	2	-	-	2	-	1	-	1	-
CO4	1	3	1	2	-	-	-	1	3	-	-	3	-	1	-	1	-
CO5	1	3	1	2	-	-	-	1	2	-	-	2	-	1	-	1	-

**1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation**  
Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
AT306	CENTRAL STERILE SUPPLY DEPARTMENT(CSSD)PROCEDURES LAB	√	√	√			√	√	3,4





## Integral University, Lucknow

<b>Effective from Session: 2023-2024</b>							
<b>Course Code</b>	<b>AT307</b>	<b>Title of the Course</b>	<b>ADVANCE ANESTHESIA TECHNIQUE LAB</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Year</b>	<b>III</b>	<b>Semester</b>	<b>V</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>
<b>Pre-Requisite</b>	<b>Nil</b>	<b>Co-requisite</b>	<b>Nil</b>				
<b>Course Objectives</b>							

Course Outcomes	
<b>CO1</b>	Students will be able to learn about Picratemethod, Benedict's/ Uristixmethod
<b>CO2</b>	Students will be able to learn about Rothera Nitroprussidetest, Serum Amylase, Serum Lipase estimation
<b>CO3</b>	Students will be able to learn about Malloy–Evelyn method, BCG method
<b>CO4</b>	Students will be able to learn about Uricase/ PAP method
<b>CO5</b>	Students will be able to learn aboutSemi Autoanalyzer, Flame Photometer

Unit No.	Title of the Unit	Content of Unit	Contact Hrs.	Mapped CO
1.	<b>NEURO ANAESTHESIA</b>	<ul style="list-style-type: none"> <li>Glasgow coma scale,</li> <li>CT, Angiography and MRI ,</li> <li>Checklist ,</li> <li>Induction of a patient.</li> </ul>	30	CO1
2.	<b>OBSTETRIC ANAESTHESIA</b>	<ul style="list-style-type: none"> <li>Differences between a pregnant and a normal lady, anaesthesia. ,</li> <li>Precautions to be taken , anaesthesia Check list,</li> <li>Regional vs general anaesthesia,</li> <li>Resuscitation of the newborn.</li> </ul>		CO2
3.	<b>PEDIATRIC ANAESTHESIA</b>	<ul style="list-style-type: none"> <li>Check list , Premedication - modes , Induction ,Intubation - Securing the EIT.</li> <li>Reversal &amp; extubation.</li> <li>Pain management.</li> </ul>		CO3
4.	<b>CARDIAC ANAESTHESIA</b>	<ul style="list-style-type: none"> <li>NYHA classification.</li> <li>Setting up of monitoring system.</li> <li>Getting ready for the case.</li> </ul>		CO4

<b>Reference Books:</b>	
1.	Ajay Yadav Short Textbook of Anaesthesia Jaypee
2.	Anshul Jain Essentials of Anaesthesia& Critical Care Jaypee
3.	Principles of anaesthesia equipment's – Yasodhanandha arit
4.	The Anaesthesia Technologist's Manual by Emily S Guimaraes, Matthew Davis, Jeffrey R Kirsch, Glenn Woodworth
5.	Introduction to the Surgery by Marketa Duskova
<b>e-Learning Source:</b>	
5.	<a href="https://www.youtube.com/watch?v=aXt1DbdeBXk">https://www.youtube.com/watch?v=aXt1DbdeBXk</a>
6.	<a href="https://www.youtube.com/watch?v=esxafXkG6zk">https://www.youtube.com/watch?v=esxafXkG6zk</a>
7.	<a href="https://www.youtube.com/watch?v=GDcoeWBxOjc">https://www.youtube.com/watch?v=GDcoeWBxOjc</a>
8.	<a href="https://www.youtube.com/watch?v=vAL8H3idU6k">https://www.youtube.com/watch?v=vAL8H3idU6k</a>

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
	<b>CO1</b>	1	3	2	2	-	-	-	1	2	1	-	2	-	2	2	1
<b>CO2</b>	1	3	1	3	-	-	-	2	3	-	-	3	-	1	1	1	-
<b>CO3</b>	1	3	1	2	-	-	-	1	2	2	-	2	-	1	1	1	-
<b>CO4</b>	1	3	1	2	-	-	-	1	3	-	-	3	-	1	2	1	-
<b>CO5</b>	1	3	1	2	-	-	-	1	2	1	-	2	-	1	1	1	-

**1- Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation**

Course Code	Course Title	Attributes							SDGs No.
		Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	
AT307	ADVANCE ANESTHESIA TECHNIQUE LAB	√	√	√			√	√	3,4



## Integral University, Lucknow

<b>Effective from Session: 2023-24</b>							
<b>Course Code</b>	<b>AT308</b>	<b>Title of the Course</b>	<b>OT POSTING</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>Year</b>	<b>III</b>	<b>Semester</b>	<b>V</b>	0	0	10	5
<b>Pre-Requisite</b>	Nil	<b>Co-requisite</b>	Nil				
<b>Course Objectives</b>	Students will engage in clinical practice in Physiotherapy departments in the musculoskeletal, neurology, cardiopulmonary, sports settings to enhance their clinical skills and apply contemporary knowledge gained during teaching sessions.						

Course Outcomes	
<b>CO1</b>	To learn the punctuality and interaction with colleague and supporting staff during clinical training.
<b>CO2</b>	To develop assessment skills.
<b>CO3</b>	To develop appropriate treatment protocol.
<b>CO4</b>	To understand the importance of documentation of the case record and case presentation.
<b>CO5</b>	To develop discipline and improve overall quality of clinical work.

### CLINICAL POSTING ASSESSMENT FORM

<b>Name of Student:</b>		<b>Session:</b>	
<b>Enrolment Number:</b>		<b>Date:</b>	
<b>Name of Subject:</b>	<b>OT POSTING</b>	<b>Subject code:</b>	AT308
<b>Topics:</b>			

S. No.	Point to be Considered	Max. Marks	Marks Obtained
1.	Punctuality	4	
2.	Interaction with colleagues and supporting staff	2	
3.	Maintenance of case records	3	
4.	Presentation of case during rounds	2	
5.	Maintained OT records	2	
6.	OT Manners	2	
7.	Rapport with patients	2	
8.	Assistance during operative procedures	3	
9.	Discipline	2	
10.	Overall quality of clinical work	3	
<b>TOTAL SCORE</b>		<b>25</b>	

(Name and signature of In-charge)

(Head, Paramedical)

#### GUIDELINES FOR CLINICAL TRAINING PROGRAM

The students of Post Graduate BAICT program must spend above mentioned allotted time period in the hospital based clinical training for specified clinical experiences to meet the objectives of the training program. This period of practical and theoretical experience will enable the students to acquire competency and experience to perform as an independent practice and will enable to adjust to the real practical life in different units in the hospital settings.

S.No.	Program Name	Year/Semester	Duration of Training
1.	BAICT	II Year/ V Semester	4 Months
2.		II Year/ V Semester	4 Months
3.		III Year/ V Semester	4 Months
4.		III Year/ V Semester	4 Months

By the successful completion of this clinical training period, the student is expected to fulfil the objectives of the program and will be examination as given below:

S.No.	Program Name	Year/Semester	Case file	Practical on Case	Voice/Viva	Attendance
1.	BAICT	II Year/ V Semester	10 Marks	10 Marks (1 Long Case and 2 Short Case)	25 Marks	5 Marks
2.		II Year/ V Semester				
3.		III Year/ V Semester				
4.		III Year/ V Semester				

#### EVALUATION OF CLINICAL POSTING

BAICT- Students has to prepare 1 long case and 2 short cases during their clinical posting. The evaluation for internal clinical examination of 50 marks will be distributed:

Cases during clinical posting=**25 marks.**

Viva voce =**20 marks**

Attendance=**5 marks**

Course Articulation Matrix: (Mapping of COs with POs and PSOs)																	
PO-PSO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4	PSO5
<b>CO1</b>	2	3	3	2	3	2	3	1	2	1	-	-	3	2	3	3	2
<b>CO2</b>	3	3	3	3	2	2	3	2	1	3	-	-	2	2	3	2	3
<b>CO3</b>	3	3	3	3	2	2	3	2	1	3	-	-	3	2	2	2	3
<b>CO4</b>	3	3	3	3	2	2	3	2	1	3	-	-	2	3	2	2	3
<b>CO5</b>	3	3	3	3	2	2	3	2	1	3	-	-	3	2	3	3	2

1-Low Correlation; 2- Moderate Correlation; 3- Substantial Correlation Attributes & SDGs

Course Code	Course Title	Attributes							SDGs No.
AT308	OT POSTING	Employability	Entrepreneurship	Skill Development	Gender Equality	Environment & Sustainability	Human Value	Professional Ethics	<b>3,4,11</b>
		√	√	√			√	√	