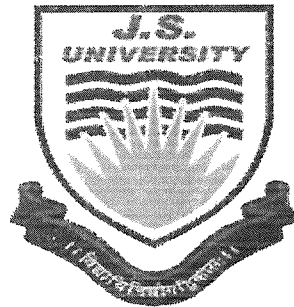


# **J.S. University, Shikohabad**

Established by UP Govt. Act No. 07 of 2015


Recognized by U.G.C. under section 2 (f) of Act-1956



**Value Added Course**

**(Infection Control)**

**Faculty of Nursing**

	J.S. University, Shikohabad Faculty of Nursing	Value Added Course
		AY: 2019-20

## Infection Control

**Learning Outcome:**


This Course will provide knowledge of Infection Control

**Duration:** 30 Hours. (Theory and Practical)

**Prerequisites:**

**Assessment Criteria/ Award of certification:**

Participants who secured 90% attendance and secured 80% marks in final quiz shall be awarded the completion of certificate

	<b>J.S. University, Shikohabad</b> <b>Faculty of Nursing</b>	<b>Value Added Course</b>
		AY: 2019-20

### Course Objectives: -


Maximum Exposure has to be given on Practical Oriented After completion of the course the student shall be able to:-

1. Develop knowledge and understanding of Hospital acquired Infections (HAI) and effective practices for prevention
2. To describe the infection control
3. Demonstrate and practice steps in Hand washing and appropriate use of different types of PPE
4. Illustrate various disinfection and sterilization methods and techniques
5. Demonstrate knowledge and skill in specimen collection, handling and transport to optimize the diagnosis for treatment
6. Incorporate the principles and guidelines of Bio Medical waste management
7. Identify employee safety indicators and risk of occupational hazards
8. Develop understanding of the various safety protocols and adhere to those protocols

This program is an endeavour to prepare healthcare professionals for implementation of hospital infection control activities in their day to day practices to prevent hospital acquired infections

### Course Outcome

1. Demonstrate and practice steps in Hand washing and appropriate use of different types of PPE
2. Apply the knowledge of multispecialist hospital.
3. Apply the knowledge in community .
4. Illustrate various disinfection and sterilization methods and techniques
5. Apply the principles of Antibiotic stewardship in performing the nurses' role
6. Apply the knowledge of International Patient Safety Goals (IPSG) in the patient care settings
7. Develop understanding of the various safety protocols and adhere to those protocols

	J.S. University, Shikohabad	<b>Value Added Course</b>
	Faculty of Nursing	AY: 2019-20

## Course overview

This course on infection control

Unit	Content	Theory hours	Practical hours
Unit -1	Routes of transmission and their prevention, Infection control programme organization ,Needle sticks injury and post exposure prophylaxis, Sterilization and disinfection ,Surveillance	4hrs	
Unit-2	Personal protective equipment and standard precautions, Isolation protocols, Biomedical waste management	6hrs	2hrs
Unit-3	Central Sterile Services Department (CSSD),Laundry, Kitchen, Housekeeping, Device associated infections: Antimicrobial resistance (AMR)	4hrs	3hrs
Unit-4	Vaccination, Blood spill, Hand hygiene, Environmental surveillance, surveillance in hospital	6hrs	5hrs

Theory- 20 hrs

Practical- 10 hrs

# Infection Control

## Unit-1

### **Routes of transmission and their prevention:**

Various routes of transmission of infection and methods of prevention of infectious diseases in hospital settings.

### **Infection control programme organization:**

Role of hospital administration in hospital infection control, hospital infection control committee, infection control team, role of ICN, other staff, infection control manual, introduction to surveillance of hospital infection control.

### **Surveillance**

Different principles and practices of surveillance of hospital acquired infections such as device associated infections (Ventilator associated pneumonia [VAP], Catheter associated urinary tract infections [CAUTI], and Central line associated blood stream infections [CLABSI]), surgical site infections (SSI), Clostridium difficile infection (CDI) and their routine surveillance. Hands on training in surveillance of hospital acquired infections will be provided.

**Needle sticks injury and post exposure prophylaxis:**

Needle stick injury (NSI), safe injection practices and post exposure prophylaxis (PEP) protocols among hospital staff, exposure reporting, evaluation of occupational exposure sources.

**Sterilization and disinfection:**

Various physical and chemical methods of sterilisation and disinfection will be taught to the candidates. Cleaning and reprocessing of medical equipment, disinfection of Hepatitis B virus, Hepatitis C virus, HIV or TB contaminated devices. Practical hands on training will be conducted in the department of microbiology.

## Unit-2

**Personal protective equipment and standard precautions:**

Correct method of use of personal protective equipment (PPE), the significance of taking standard precautions, elements of standard precautions, supportive measures, administrative responsibilities, education and training of healthcare workers, patients and families will be taught to the candidates.

**Isolation protocols:**

Protocols regarding indications of isolation in relation to infectious diseases such as swine flu, managing a patient during isolation, standard precautions to be taken in these patients will be taught to the candidates

**Biomedical waste management:**

BMW rules 2016 update will be given to the candidates along with hands on training.

## Unit-3

**Central Sterile Services Department (CSSD):**

Visit to the central sterile services department along with infection control practices being followed in CSSD. Location and organization of CSSD in a hospital, workflow, transport and reception of non sterile items, cleaning of devices and items, drying, assembling and packaging, sterilization will be discussed in detail.

**Laundry:**

Training on method of collecting and processing used hospital laundry such as linens, towels and other material along with segregation of such articles for sterilization and reuse based on pre-defined criteria will be imparted.

**Kitchen:**

Hospital infection control practices to be followed in the kitchen along with surveillance techniques followed in the kitchen such as cultures of various work surfaces and food items, pest control, waste management, inspection and supervision, cleaning of kitchen, special precautions in food preparation and storage.

**Housekeeping:**

Candidates will be sensitized towards the importance of training and educating the house keeping staff in prevention of hospital acquired infections.

**Device associated infections:**

Comprehensive teaching along with hands on training on various device associated infections such as VAP, CAUTI, CLABSI, their bundle care protocols and related aspects, prevention bundles, safe handover, inventory management, checklist and kits for different protocols such as lumbar puncture kit, central line kit etc

**Antimicrobial resistance (AMR):**

General aspects of AMR, control of antimicrobial resistance in health care facilities, Extended Spectrum Beta Lactamase producing Gram negative bacteria, Methicillin Resistant Staphylococcus aureus, Vancomycin Intermediate Staphylococcus aureus, CDI, Vancomycin resistant Enterococci, Mycobacterium tuberculosis, incidence of multidrug resistant organism infections, challenges in routine patient care, antimicrobial stewardship, antibiotic policy and its significance in reducing AMR in hospital.

## Unit-4

**Vaccination:**

Role of vaccination in reducing severe HAI such as Hepatitis B, H1N1 and other hospital acquired infections. Important vaccines in HIC such as Hepatitis B, H1N1, MMR, chickenpox.

**Blood spill:**

Management of blood spill with practical demonstration using simulated conditions.

**Hand hygiene:**

The role of hand hygiene in hospital acquired infection. Steps of hand washing and related topics will be dealt in detail.

**Environmental surveillance:**

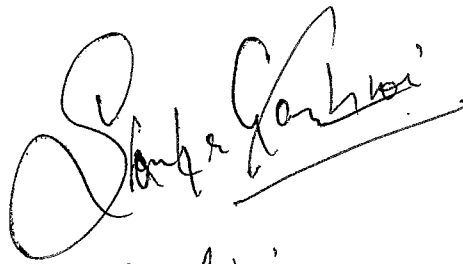
Disinfection of OT & ICU and taking surveillance cultures from critical areas, setting up surgical site infection surveillance in hospital.

**Assessment of Training: -**

Exit Examination :- As per the Institutional guidelines The certificate is awarded after a final exit examination, at the end of the 6 weeks training period.

**References:**

1. Hospital Acquired Infections- Prevention and Control by Purva Mathur. Publisher: Lipincott Williams & Wilkins.
2. National, CDC, WHO guidelines on Hospital Infection Control.
3. Journals:



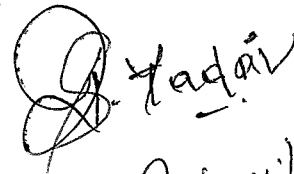
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