



King Saud University

College of Nursing

AY 2017-2018-1438-1439 H 1st Semester

Course Syllabus

<u>Course Code</u>	: NUR 312
<u>Course Title</u>	: Infection Control
<u>Credit unit/hours</u>	: 3 (3+0+0)
<u>Pre-requisite</u>	: None
<u>Co-requisite</u>	: None
<u>Study Level</u>	: 4th level
<u>Faculty</u>	: 312 NUR Team

Lecturer; Abeer Fouad Saad

Lecturer :Eman Abu-Alfawaris

Course Description:

This course was designed to acquaint the student with knowledge, skills and attitudes necessary to practice basic infection control measures at different level of prevention in health care settings. This course is designed to help the students to acquire knowledge related to different micro-organisms either useful or harmful for living creatures, the chain of infection & the factors affecting susceptibility. Methods of disinfection, sterilization, medical & surgical asepsis, universal precaution and infection control prevention strategies, policies and procedures will be emphasized. The course will also provide skills needed to ensure environmental safety from various infections for maintaining a healthy and hygienic society.

Course Objectives:

Upon completion of this course the student will be able to:

1. Acquaint the student with an overview through knowledge, skills and attitudes necessary to practice basic infection control measures at different level of prevention in health care settings.
2. Define the key terms related to infection control.
3. Acquire knowledge related to different micro-organisms either useful or harmful for living creatures, the chain of infection & the factors affecting susceptibility.
4. Discuss the methods of disinfection, sterilization, medical & surgical asepsis; universal precaution and infection control prevention strategies, policies and procedures will be emphasized.
5. Provide skills needed to ensure environmental safety from various infections for maintaining a healthy and hygienic society.
6. Demonstrate the universal and standard precautions to patient care situations in order to decrease the incidence of infection.
7. Utilize the principles of prevention and control in a known or suspected outbreak of health care associated infection.
8. Recognize the importance of the multidisciplinary team and the program of the Ministry of Health in the national and global issues of infection control.

Course Content:

General orientation of the Course

UNIT I – Basic Infection Control Measures at different level of prevention in health care settings

- A. Overview of Infection and Infection Control Measures
- B. Definition of Terms
 - b.1. Acquired immunity
 - b.2. Acute infection
 - b.3. Anaphylaxis
 - b.4. Artificially acquired immunity
 - b.5. Blood-borne disease
 - b.6. Blood-borne pathogens
 - b.7. Chain of infection
 - b.8. Chronic infection
 - b.9. Communicable disease
 - b.10. Contaminated waste
 - b.11. Direct contact
 - b.12. Droplet infection
 - b.13. Epidemiologic studies
 - b.14. Hazardous waste
 - b.15. Immunity
 - b.16. Indirect contact
 - b.17. Infection prevention
 - b.18. Infectious disease
 - b.19. Infectious waste
 - b.20. Inherited immunity
 - b.21. Latent infection
 - b.22. Naturally acquired immunity
 - b.23. Occupational exposure.
 - b.24. OSHA Blood-Borne Pathogens (BBP) Standard Guidelines
 - b.25. Pathogen Disease
 - b.26. Percutaneous contact
 - b.27. Per mucosal contact
 - b.28. Personal protective equipment (PPE)
 - b.29. Standard Precautions Standard
 - b.30. Universal Precautions Guidelines
 - b.31. Virulence

- C. Settings of Infection
 - 3.1. Community
 - 3.2. Hospital
- D. Levels of prevention
- E. Common communicable and non- communicable diseases

UNIT II- Different Micro-organisms either useful or harmful for living creatures, the chain of infection & the Factors affecting susceptibility

- A. Sources and Types of Infection
 - a.1. Acute Infection
 - a.2. Chronic Infection
 - a.3. Latent Infection
 - a.4. Opportunistic Infection
- B. Microorganisms useful or harmful for living creatures
- C. Chain of Infection
 - c.1. Virulence
 - c.2. Number of Microorganisms
 - c.3. Susceptible Host
 - c.4. Portal of Entry
- D. Factors affecting susceptibility
 - d.1. Naturally Acquired Immunity
 - d.2. Artificially Acquired Immunity
- E. Mode of Transmission of Infection
 - d.1. Blood/Body fluid transmission
 - d.2. Congenital Infection
 - d.3. Common Vectors (e.g. food-borne, water-borne)
 - d.4. Vectors (insects)
 - d.5. Airborne transmission
 - d.6. Contact transmission
 - Direct Contact
 - Indirect Contact
 - d.7. Droplet transmission

Body's defenses

UNIT III- Methods, Universal Precaution and Infection Control Prevention strategies, policies and procedures

- A. Immunization /Vaccination
- B. Specific Nursing Skills
 - b.1. Medical and Surgical Hand washing
 - b.2. Personal Protective Equipment
 - b.3. Safe handling in disposal of sharps
- A. Standard and Universal Precautions (Airborne, Droplet, Contact, Isolation)
- B. Disinfection, Sterilization, Medical and Surgical Asepsis
- C. Infection Control Prevention and Policies and Procedures
(According to Communicable Disease Control)
- D. OSHA Standards

UNIT IV - Skills needed to ensure Environmental Safety from various infections for maintaining a healthy and hygienic society

- a.4. Outbreak management of infection
 - a.4.1. National and Global issues
 - a.4.2. Program of the Ministry of Health
 - a.4.3. Infection Control team
 - a.4.4. Multidisciplinary roles in infection control
 - a.4.5. Monitoring and Evaluation

Course Methodology:

- Participative Lecture- discussion
- Individual and group activities
- Experiential Sharing
- Brainstorming
- Multimedia Presentations

Course Requirements:

The students are expected to comply the following:

- Pass the quizzes and periodic / term examinations.
- Prepare an oral presentation (seminar type, booth/ exhibit) at the end of the term.
- Participate in the different classroom activities

Course Evaluation:

Formative (60%)	Weight Score	
Class Standing		
1. Written Presentation		5
2. Oral Presentation		5
• Quiz 1		10
Midterm Examination (1 and 2)	20,20	40
Sub-Total		60
Summative (40%)		
Final Examination		40
Total		100

Required References:

Singh, S., Gupta, K. , Kant, S. (2012). Hospital Infection Control Guidelines: Principles and Practice. Jaypee Brothers Medical Publishers. New Delhi. Panama . London. Dhaka.
Damani, N. (2003). Manual of Infection Control Procedures. Greenwich Medical Media. 137 Euston Road ,London.

Essential References:

Smeltzer. A. (2010). Brunner and Suddarth's Textbook of Medical-Surgical Nursing. Wolters Kluwer Health. Lippincott, Williams and Wilkins.
Phipps, S. Medical Surgical Nursing Health and Illness. Perspectives. (2003). 7th edition. Lippincott. Mosby.
Perry and Potter. Clinical Nursing Skills and Techniques. (2014). 8th edition. Elsevier. Mosby.

Electronic Sources:

<http://www.vdh.virginia.gov/epidemiology/surveillance/hai/documents/pdf/Chain%20of%20Infection%20Fact%20Sheet.pdf>
<https://www.osha.gov/Publications/osha2254.pdf>
http://www.cdc.gov/hicpac/pdf/guidelines/eic_in_HCF_03.pdf

NUR 312 Time Table

Weeks/Date	Lecture/ Activities
Week 1	General Orientation on the Course, Schedule
Week 2	UNIT 1- Basic infection control measures at different level of prevention in health care settings.
Week 3	Continuing unit 1 Activity 1
Week 4	UNIT 2- Different micro-organisms either useful or harmful for living creatures, the chain of infection & the factors affecting susceptibility and body defense QUIZ 1: Coverage Unit 1.
Week 5	Continuing unit 2- (Infection chain)
Week 6	Continuing unit 2- (Body defense)
Week 7	MIDTERM EXAMINATION 1 (Coverage Units 1 and 2)
Week 8	UNIT 3- Methods, universal precaution and infection control prevention strategies, policies and procedures
Week 9	Continuing unit 3
Week 10	Continuing unit 3 Activity 2
Week 11	UNIT 4- Outbreak management according WHO recommendation & Infection control program
Week 12	MIDTERM EXAMINATION 2 (Coverage Units 3)
Week 13	Continuing unit 4
Week 14	Continuing unit 4
Week 15	PRESENTATION OF STUDENTS ASSIGNMENT Submission of Requirements
Week 16	FINAL EXAMINATION (Coverage : All Units)

Prepared by:

Nur 312 team -MALE CAMPUS

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Course coordinator: Lecturer; Abeer Fouad Saad

Date revised : September 10, 2017