



SCHOOL OF PHARMACY AND HEALTH SCIENCES

SEMESTER:

COURSE: **PHM 3485: CLINICAL MANAGEMENT OF BACTERIAL AND VIRAL DISEASES**

LECTURER :

CLASS DAYS/TIME:

CLASS VENUE:

CREDIT UNIT: 3.0

OFFICE HOURS:

CONTACTS:

1. DESCRIPTION

1.1 Prerequisite: PAT 3371; PHM 3471;

1.2 This course gives the students an understanding of the functions of clinical pharmacy and the hospital and community pharmacy practice in management of Bacterial and Viral diseases.

2. Link to University Mission and Program Learning Outcomes:

The course is linked to the following University Mission Outcomes:

LINK TO UNIVERSITY MISSION AND PROGRAM LEARNING OUTCOMES:

1. **High order thinking:** The ability to collect, analyze and evaluate information and formulate conclusions. Students develop and demonstrate the ability to think critically, analytically and creatively.
2. **Literacy:** Competence in oral, written, quantitative, and technological skills. Students develop and demonstrate competency in oral and written communication as well as demonstrate scientific, quantitative and technological literacy.
3. **Global understanding and multicultural perspective:** Awareness, knowledge and appreciation of both the diversity and commodity of cultures. Students acquire these perspectives through formal study of languages, history, literature and the arts and through working, studying and living cooperatively in a radically, ethnically, and culturally diverse environment. Further, students acquire an understanding of economic, historical, political, geographic and environmental relationships on a global basis.

4. **Preparedness for career:** Mastery of a field of knowledge and its multi-cultural and multinational application. Such mastery is accomplished through both formal study and various experienced forms of learning such as internships and field experiences.
5. **Community service and development:** A sense of being part of a community and a desire to be of service to it. Students are given opportunities to participate in community service, citizenship, or social action projects or activities.
6. **Leadership and ethics:** As part of their growth and development, students formulate and articulate the ethical standards which will guide their professional and personal lives.

3.0 PROGRAM LEARNING OUTCOMES

By the end of their training the graduates should be able to:

1. Plan, organize and control the manufacturing, compounding, packaging and quality of pharmaceutical products.
2. Plan, organize and manage the procurement, storage and distribution of pharmaceutical materials and products.
3. Interpret and uphold the laws, regulations and ethics that govern the practice of pharmacy.
4. Provide pharmacist-initiated care to patients and ensure the rational use of medicines.
5. Provide information, advice and education on disease, health, community health and medicines-related issues.
6. Participate in pharmaceutical and medical research and evaluate critically new therapies and current advances in formulation and modes of drug action to ensure the optimal selection and use of medicines.

4.0 COURSE LEARNING OUTCOMES

At the end of the course, the student should be able to:

- State the roles of clinical pharmacy in management of Bacterial and Viral diseases
- Formulate a pharmaceutical care plan for management of Bacterial and Viral diseases
- Identify the components of rational prescribing for Bacterial and Viral diseases
- Manage poisoned patients
- Describe rational use of anti-bacterial and anti-viral diseases drugs in paediatrics and geriatrics

5.0 COURSE CONTENT

Bacterial, chlamydial, rickettsial and viral infections: Infections of the Central nervous system, Bones and joints, Respiratory tract, genital urinary tract, gastrointestinal system, skin, eye, cardiovascular system, ear, nose and throat, liver and pancreas. Hemorrhagic fevers, HIV and opportunistic infections. Principles of anti-bacterial and anti-viral chemotherapy. Antibacterial and antiviral drugs. These will be broken down for weekly delivery as below:

WEEK NO	TOPICS
Week 1	Principles of antimicrobial chemotherapy
Week 2	Diagnostic tests used in microbiology
Week 3	Infections of the nervous system-meningitis, brain abscess, encephalitis, rabies, tetanus, polio
Week 4	Respiratory tract infections- acute bronchitis, pneumonia, tracheitis, diphtheria, whooping cough
Week 5	ENT infections- acute and chronic otitis media, sinusitis, pharyngitis, Eye infections
Week 6	Gastrointestinal infections- Gastroenteritis, Typhoid and paratyphoid fever, cholera, botulism,
Week 7	Mid-semester examination
Week 8	CVS infections- Rheumatic heart disease, Endocarditis.
Week 9	Skin, soft tissue and bone infections- furuncles, abscess, erysipelas, impetigo, cellulitis. osteomyelitis
Week 10	Viral hepatitis, liver abscess, pancreatic abscess
Week 11	HIV and opportunistic infections
Week 10	HIV and opportunistic infections
Week 11	Genital urinary infections-
Week 12	Hemorrhagic fevers
Week 13	Cryptococcosis
14. End of semester examination	

6.0 Mode of Delivery;

Lectures, power point presentations, and class discussions. These will take a participatory approach. **Laboratory learning and Experiments:** The lecturer, together with the Clinical Ward staff, will take the students through practical ward sessions, beginning with **demonstrations**, then **bedside note taking, patient notes and files review, advisories**. The students will thereafter be expected to use pre formulated ward manuals to carry out various practical exercises then write out their findings in their workbooks. **Video demonstrations and/or CD-Roms** on Clinical Pharmacy when available, after the relevant topic has been covered. **Assignment criteria:** Students will be given several individual or group research assignments on topics relevant to the course. These could include lectures, discovery learning, problem-based learning, experimental learning, group-based learning, independent studies and e-learning.

7.0 Instructional Materials and/or Equipment;

Lecture notes or power points for presentation; Tutorials; Video demonstrations; CD-Roms; Microscopes; Text books; Ward Manuals, Diagnostic Set; biochemical charts; anatomical and physiological atlases.

8.0 Course Assessment;

8.1 Distribution of Marks

Attendance & Participation	10%
Continuous Assessment Tests /Quizzes	10%

Group Assignment		10%
Ward exercises		20%
Oral examination	05%	
Mid-Quarter Exam		20%
Final Exam		25%
Total		<u>100%</u>

8.2 Grading

90 – 100	A
87 - 89	A ⁻
84 - 86	B ⁺
80 - 83	B
77 - 79	B ⁻
74 - 76	C ⁺
70 - 73	C
67 - 69	C ⁻
64 - 66	D ⁺
62 - 63	D
60 - 61	D ⁻
00 - 59	F

8.3 Core Reading Materials for the Course

[Walker](#), R. & Cate [Whittlesea](#), C. eds. (2011). Clinical Pharmacy and Therapeutics, 5th Edition. Churchill Livingstone, Oxford, UK

[Wiffen](#), P., [Mitchell](#), M., [Snelling](#), M., [Stoner](#), N. (2012). Oxford Handbook of Clinical Pharmacy. 2nd Edition. Oxford University Press, USA

8.4 Recommended Reference Materials;

[Aldredge, B. K.](#), [Corelli, R. L.](#), Ernst, [Guglielmo Jr., B. J.](#), [Jacobson, P. A.](#), [Kradjan, W. A.](#), [Williams, B. R.](#) (2012). Koda-Kimble and Young's Applied Therapeutics: The Clinical Use of Drugs. North American 10th Edition. Lippincott Williams & Wilkins, Hagerstown, MD

Dodds, L. J. (2013). Drugs in Use: Clinical Case Studies for Pharmacists and Prescribers. 5th Edition. Pharmaceutical Press, London, UK.

[Hubbard](#), J. (2009). A Concise Review of Clinical Laboratory Science. 2nd Edition. Lippincott Williams & Wilkins, Hagerstown, MD

[McPhee](#), S. J., [Hammer](#), G. D. (2009). Pathophysiology of Disease: An Introduction to Clinical Medicine. 6th Edition. McGraw-Hill Medical, New York, USA