

<b>THOMAS ADEWUMI UNIVERSITY OKO COURSE OUTLINE</b>		
Faculty	COMPUTING AND APPLIED SCIENCES	
Department	BIOLOGICAL SCIENCES	
Course title	<b>PATHOGENIC MYCOLOGY</b>	
Year of study	3	
Course code	MCB 310	
Credit hours	2	
Contact hours	30	
Mode of delivery	CLASSROOM LECTURES	
Mode of assessment		WEIGHT%
Continuous assessment		30%
Final examination		70%
Total		100%
Course lecturers and Instructors	MR. BAMIDELE OLADAPO -LECTURER	
Course description	Pathogenic Mycology is a course that reveals the world of medically relevant fungi. The course is an exploration of the biology, diversity, and impact of pathogenic fungi on animal and human health. Through detailed studies of fungal infections, students will gain insights into the mechanisms of pathogenesis, host-fungus interactions, and diagnostic methods.	
Course objectives	<p>This course will make it possible to understand</p> <ol style="list-style-type: none"> <li>1. The diverse range of pathogenic fungi and their classification.</li> <li>2. The interactions between pathogenic fungi and host immune systems.</li> <li>3. The mechanisms by which pathogenic fungi invade host tissues, cause diseases, and establish infections.</li> <li>4. Mechanisms of evasion and immune response by host.</li> <li>5. The recognition and diagnoses of fungal infections using laboratory techniques.</li> <li>6. The factors contributing to the emergence and spread of fungal infections in different populations.</li> </ol>	

	7. The control methods used to stem the spread of fungal infections in the population
Learning outcomes	<p>By the end of the course, students will be able to:</p> <ol style="list-style-type: none"> <li>1. Appreciate and understand the diverse range of pathogenic fungi and their classification.</li> <li>2. Explain the interactions between pathogenic fungi and host immune systems.</li> <li>3. Explain the mechanisms by which pathogenic fungi invade host tissues, cause diseases, and establish infections.</li> <li>4. Describe the mechanisms of evasion and immune response by host.</li> <li>5. Recognize and diagnose fungal infections using laboratory techniques.</li> <li>6. Explain the factors contributing to the emergence and spread of fungal infections in different populations.</li> <li>7. Describe the control methods used to stem the spread of fungal infections in the population</li> </ol>
Teaching and learning	The class will meet for two hours a week. It will be lecture only sessions.
Detailed course content	General characteristics of pathogenic fungi especially in their relationship to diseases. Principles of infection, pathogenesis and immunity, emphasis on mycological techniques for laboratory diagnosis. Principles of disease control are emphasized
Course content sequencing	
Weeks	
Week 1	General characteristics of pathogenic fungi especially in their relationship to diseases.
Week 2	Principles of infection, pathogenesis and immunity, emphasis on mycological techniques for laboratory diagnosis.
Week 3 – 5	Principles of infection, pathogenesis and immunity, emphasis on mycological techniques for laboratory diagnosis. Continuous Assessment 1
Week 6 – 8	Principles of disease control
Week 9	Continuous Assessment 1

Week 9 – 12	Revision
Recommended reading material	
<ol style="list-style-type: none"> <li>1. Joanne Willey and Kathleen Sandman and Dorothy Wood (2020). Prescott's Microbiology. McGraw-Hill Higher Education</li> <li>2. Michael T. Madigan, Kelly S. Bender, Daniel H. Buckley W. Matthew Sattley and David A. Stahl (2019) Brock Biology of Microorganisms. Pearson Education Limited</li> <li>3. Stephen H. Gillespie and Kathleen B. Bamford (2012). Medical Mycology and Infection at a Glance. John Wiley and Son, Ltd</li> <li>4. William D. Dismukes, Peter G. Pappas and Jack D. Sobel (2003) Clinical Mycology. Oxford University Press.</li> </ol>	

Course code: MCB 310

Course title: PATHOGENIC MYCOLOGY

Preamble: Pathogenic Mycology is a course that reveals the world of medically relevant fungi. The course is an exploration of the biology, diversity, and impact of pathogenic fungi on animal and human health. Through detailed studies of fungal infections, students will gain insights into the mechanisms of pathogenesis, host-fungus interactions, and diagnostic methods.

Specific course objectives/learning outcomes.

The course will enable the understanding of the following:

1. The diverse range of pathogenic fungi and their classification.
2. The interactions between pathogenic fungi and host immune systems.
3. The mechanisms by which pathogenic fungi invade host tissues, cause diseases, and establish infections.
4. Mechanisms of evasion and immune response by host.
5. The recognition and diagnoses of fungal infections using laboratory techniques.
6. The factors contributing to the emergence and spread of fungal infections in different populations.
7. The control methods used to stem the spread of fungal infections in the population

Learning activities/Course delivery methods

1. Lectures: detailed content of course are taught in class
2. Laboratory Sessions: the practical application of the course is demonstrated in the laboratory

Course content: Cell organization: General characteristics of pathogenic fungi especially in their relationship to diseases. Principles of infection, pathogenesis and immunity, emphasis on mycological techniques for laboratory diagnosis. Principles of disease control are emphasized