



Academic Course Specification Form

استمارة توصيف المقرر الأكاديمي

القسم الخاص بالطالب Section Concerning the Student

1. Course Code:	BIOLS 354	1. رمز المقرر:
2. Course Title	Mycology	2. اسم المقرر:
3. College:	College of science	3. الكلية:
4. Department:	Biology	4. القسم:
5. Academic Program:	Bachelor of Science in Biology	5. البرنامج الأكاديمي:
6. Course Credits:	2-2-3	6. عدد الساعات المعتمدة:
7. Course NQF Level:	8	7. مستوى المقرر وفقا للإطار الوطني للمؤهلات:
8. Notional Hours:	126	8. عدد الساعات الافتراضية:
9. NQF Credits:	13	9. عدد الساعات المعتمدة للمقرر وفقا للإطار الوطني للمؤهلات:
10. Prerequisite:	BIOLS 222	10. المتطلب السابق للمقرر:
11. Lectures Timing & Location:		11. وقت المحاضرة ومكانها:
1. General Mode of Teaching and Learning	تقليدي Traditional	12. النمط العام للتعليم والتعلم:

2. Course Coordinator:		13. منسق المقرر:
3. Course Instructor:		14. مدرّس المقرر:
4. Office Hours and Location:		15. الساعات المكتبية ومكانها:
5. Instructor's Email:		16. البريد الإلكتروني لمدرّس المقرر:
6. Academic Year:		17. السنة الأكاديمية:
7. Semester:		18. الفصل الدراسي:
8. Textbook(s):	19. الكتب الدراسية للمقرر:	
<p>The Fungi" (4th Edition, 2020) by Sarah C. Watkinson, Lynne Boddy, and Nicholas P. Money: Watkinson, S. C., Boddy, L., & Money, N. P. (2020). <i>The Fungi</i> (4th ed.). Academic Press.</p> <p>Textbook of Medical Mycology" (4th Edition, 2022) by Jagdish Chander: Chander, J. (2022). <i>Textbook of Medical Mycology</i> (4th ed.). Jaypee Brothers Medical Publishers.</p>		
9. References:	20. المراجع:	
<p>Introductory Mycology" by C.J. Alexopoulos, Charles W. Mims, and M. Blackwell Edition: 4th Edition Publication Year: 1996</p> <p>The Fungi" by Sarah C. Watkinson, Lynne Boddy, and Nicholas P. Money Edition: 3rd Edition Publication Year: 2015</p>		
10. Other Learning Resources Used (e.g. e-learning, field visits, periodicals, software, etc.):	21. مصادر التعلّم الأخرى (مثال: التعلّم الإلكتروني، زيارات ميدانية، دوريات، برمجيات، إلخ....)	
<p>Online Courses and Lectures:</p> <p>Coursera and edX offer online courses in mycology and related topics. For example, "Fungi and Their Interactions" on Coursera provides a comprehensive introduction to fungal biology and their ecological roles.</p> <p>YouTube has many educational channels, such as the "Mycology Masterclass" by Professor Lynne Boddy, which covers various aspects of fungal biology.</p> <p>Scientific Journals:</p>		

Journals like *Mycologia*, *Fungal Biology*, and *Fungal Ecology* publish the latest research and reviews in the field of mycology. These can provide up-to-date information and insights into recent advancements.

Professional Organizations and Societies:

The Mycological Society of America (MSA) and the British Mycological Society (BMS) offer resources, publications, and conferences that are valuable for students and researchers in mycology.

International Society for Human and Animal Mycology (ISHAM) focuses on medical mycology and provides resources for understanding the impact of fungi on health.

Databases and Digital Libraries:

NCBI (National Center for Biotechnology Information) provides access to a wealth of genetic information and research articles on fungi.

JSTOR and PubMed are excellent sources for academic papers and reviews on various mycological topics.

Field Guides and Identification Manuals:

Books like "Mushrooms of the Northeastern United States and Eastern Canada" by Timothy J. Baroni offer practical guides for identifying fungi in the field.

National Audubon Society Field Guide to North American Mushrooms" by Gary H. Lincoff is another great resource for students and enthusiasts.

11. Course Description (as published in the College Catalogue):	22. توصيف المقرر (حسب ما ورد في دليل الكلية):
Taxonomy, morphology, life histories, physiology, genetics and economic importance of the principal groups of fungi.	
12. Course Intended Learning Outcomes (3 to 5 CILOs):	23. مخرجات التعلّم للمقرر (CILOs) 1. إلى 5 مخرجات تعلّمية):
1. Analyze major fungal groups using taxonomic keys and phylogenetic trees.	
2. Discuss the physiological processes and genetic mechanisms in fungi.	
3. Distinguish the morphological features and structures of fungi through microscopic examination and detailed observations.	
4. Illustrate the life cycles and reproductive strategies of different fungal groups.	
5. Correlate the economic importance and ecological roles of fungi in various environments.	

13. Course Assessment Percentages (as per Regulations of Study and Examination at the University of Bahrain):		2. أساليب التقييم ونسبها المئوية (بحسب نظام الدراسة والامتحانات في جامعة البحرين):	
Assessment التقييم	Type النوع	Percentage النسبة	Assessment Date تاريخ التقييم
Quizzes	Individual فردى	10 %	
Examinations	Individual فردى	30 %	
Laboratory Exams	Individual فردى	20 %	
Final Examination		40 %	
Total	100%		
14. Description of Topics Covered		3. وصف الموضوعات التي ينبغي تناولها:	
<i>Topic Title</i> (e.g. chapter/experiment title) الموضوع		<i>Description</i> التفصيل	
1- Introduction to Fungi		Overview of fungal taxonomy, classification systems, and evolutionary relationships among principal fungal groups.	
2- Morphology and Structure of Fungi		Detailed study of the morphological characteristics of fungi, including hyphal structures, spore types, and reproductive features.	
3- Fungal Life Histories		Exploration of fungal life cycles, reproductive strategies (sexual and asexual), and their adaptation to diverse environments.	
4- Fungal Physiology		Examination of physiological processes in fungi, including nutrient acquisition, metabolism, and growth under various environmental conditions.	
5- Fungal Genetics		Study of fungal genetic systems, including sexual recombination, mutation, genetic variability, and biotechnological applications.	
6- Fungal Ecology and Symbiosis		Understanding the ecological roles of fungi in ecosystems, including symbiotic relationships (e.g., mycorrhizae, lichens) and decomposer roles.	
7- Economic Importance of Fungi		Analysis of fungi in agriculture, industry, medicine, and food production, including both beneficial and harmful impacts.	
8- Pathogenic Fungi		Study of fungi as pathogens, their role in plant and animal diseases, mechanisms of infection, and strategies for control.	

9- Applied Mycology			Practical applications of fungal research, including bioremediation, enzyme production, and emerging technologies in fungal biotechnology.	
15. Weekly Schedule			4. الجدول الأسبوعي	
Week الأسبوع	Date التاريخ	Topics Covered الموضوعات المتناولة	CIOs مخرجات التعلم للمقرر (CIOs)	Teaching/Assessment Mode and Method منهجية ونمط التدريس/التقييم
1		Introduction to Fungi	1	تقليدي Traditional
2		Taxonomy and Classification of Fungi	1	تقليدي Traditional
3		Morphology of Fungi: Hyphal Structures	3	تقليدي Traditional
4		Morphology of Fungi: Spore Types	3	تقليدي Traditional
5		Life Cycles of Fungi: Sexual Reproduction	4	تقليدي Traditional
6		Life Cycles of Fungi: Asexual Reproduction	4	تقليدي Traditional
7		Fungal Physiology: Metabolism and Growth	2	تقليدي Traditional
8		Fungal Genetics: Variability and Mutation	2	تقليدي Traditional
9		Fungal Symbiosis: Mycorrhizae and Lichens	5	تقليدي Traditional
10		Fungal Ecology: Roles in Decomposition	5	تقليدي Traditional
11		Economic Importance of Fungi in Medicine	5	تقليدي Traditional
12		Economic Importance of Fungi in Agriculture	5	تقليدي Traditional
13		Pathogenic Fungi: Plant Diseases	5	تقليدي Traditional
14		Pathogenic Fungi: Human and Animal Diseases	5	تقليدي Traditional
15		Applied Mycology: Bioremediation and Industry	2, 5	تقليدي Traditional
16				تقليدي Traditional

16. Academic Integrity Statement	5. بيان النزاهة الأكاديمية
<p>Students are to observe the highest level of honesty and academic ethics in pursuit of their academic goals as per UOB Regulations of Student Conduct and Academic Integrity, Anti-plagiarism Policies, and Students' Rights and Responsibilities Handbook. The consequences for cheating, plagiarism, unauthorized collaboration, and other forms of academic dishonesty can be very serious and will be dealt with as per the aforementioned policies and regulations.</p>	<p>يتعين على الطلبة الالتزام بأعلى مستويات الصدق والأمانة والأخلاق الأكاديمية في سعيهم لتحقيق أهدافهم الأكاديمية وفقاً للوائح سلوك الطلاب والنزاهة الأكاديمية، سياسات مكافحة الانتحال، ودليل حقوق الطلبة واجباتهم، المعمول بها في جامعة البحرين. يمكن لعواقب الغش والسرقة الأدبية والتعاون غير المصرح به وغيرها من أشكال عدم الأمانة الأكاديمية أن تكون خطيرة للغاية وسيتم التعامل معها وفقاً للسياسات واللوائح المذكورة آنفاً.</p>
17. Attendance and Absence Regulations	6. نظام الحضور والغياب
<p>Students are required to adhere to regular attendance for class lectures and practical sessions, as determined by the nature of the course, as per Article (33) of Regulations of Study and Examination at the University of Bahrain.</p>	<p>يجب على الطلبة الالتزام بالحضور المنتظم للمحاضرات الصفية والعملية، حسبما تحدده طبيعة المقرر الدراسي، ووفقاً للمادة (33) من نظام الدراسة والامتحانات في جامعة البحرين.</p>