

NARS for PhD of microbiology and immunology

أب المعرفة والفهم:

المقررات التي تحقق المعايير الأكاديمية للبرامج	مخرجات التعلم المستهدفة ILOs	(ARS) Benchmark	(NARS) المعايير القومية الأكاديمية القياسية العامة لبرامج قطاع الدراسات العليا (درجة الدكتوراه في الميكروبيولوجيا والمناعة الطبية)
1. Microbial Genetics 2. Virology 3. Immunology	A15-18 A26,32,37-40, 48-54 A64-66	State the recent advances in the field of Medical Microbiology and apply this knowledge in understanding aetiopathogenesis and diagnosis of diseases caused by micro-organisms (Maharashtra Univ)	1. The theories, concepts and modern knowledge in the field of specialization and other related field
1. Microbial genetics. 2. Immunology. 3. Mycology. 4. Virology. 5. Systematic Bacteriology. 6. Nosocomial infections.	A68 B1,3, 7-10, 17-29, 31, 32, 35-45, 47- 54 D21	Successfully implement the chosen research methodology.(Maharashtra Univ) Carry out fundamental or applied research in the branches of medicine involving microbiological work.(Maharashtra Univ)	2. The basics, methodologies, ethics of scientific research and its versatile tools
1. Microbial genetics 2. Systematic Bacteriology 3. Virology. 4. Nosocomial infections.	A43 A57- 66 B8,9,18, 25, 26, 30,34,42,,47, 49, 50 C12, 18,28, C36- 38 C40-47	Recognize the principle of prevention and control of health care associated infections and rational antibiotic policy.(Maharashtra Univ)	3. The moral and legal ethics of the professional practice in the area of specialization
1. Microbial genetics. 2. Immunology. 3. Mycology. 4. Virology. 5. Systematic Bacteriology. 6. Nosocomial infections.	A67 B26 C7,8,12,17,22,36 C38-40 C42,43, 45, 46		4. The concepts and principles of quality of the professional practice in the area of specialization
1. Microbial genetics. 2. Immunology. 3. Mycology. 4. Virology. 5. Systematic Bacteriology. 6. Nosocomial infections.	A3,5,7,19,20, 24, 25,27- 32,37, 46-48, A56-66	Organize the prevention and control of communicable diseases in the community..(Maharashtra Univ)	5. The knowledge on the effects of professional practice on the environment and ways of development and maintenance of the environment

ب - القدرات الذهنية :

المقررات التي تحقق المعايير الأكاديمية للبرامج	مخرجات التعلم المستهدفة ILOs	(ARS) Benchmark	(NARS) المعايير القومية الأكاديمية القياسية العامة لبرامج قطاع الدراسات العليا
1.General bacteriology. 2.Systematic bacteriology. 3.Microbial genetics. 4.Virology. 5. Mycology	B3, 4 B7-10 B12 B19-22 B24,25, 27, 28, 32, 36, 37, 43, 44, 46, 51,52 C1-C46	Perform and interpret immunological and serological tests(Maharashtra Univ)	1) Analyze and evaluate of information in the field of specialization and make full use of such information to solve problems
1.Microbial genetics. 2.Immunology. 3.Mycology. 4. Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	B1-54	Organize the prevention and control of communicable diseases in the community(Maharashtra Univ)	2) Solve specific problems on the basis of limited and contradictory information
1.Microbial genetics. 2.Immunology. 3.Mycology. 4. Virology. 5.Systematic bacteriology. 6.Nosocomial infections	B7-10, 18-22 B24-32 B35-45 C47 D1,4	Develop skills in the planning, design, undertaking and interpreting of a research project at Master-level. (Liverpool Univ). Assess the reliability, results and relevance of research evidence; develop effective approaches to use and monitor this evidence to improve health care(Liverpool Univ).	3) Carry out a research studies to add new information to the knowledge
1.Microbial genetics. 2.Immunology. 3.Systematic bacteriology. 4.General bacteriology. 5.Nosocomial infections	B2, 3,6,8,9, 11, 17, 26, 31,39, 47,48, 50, 54	Organize the prevention and control of communicable diseases in the community (Maharashtra Univ)	4) Write scientific papers
1.Microbial genetics. 2.Immunology. 3.Mycology. 4. Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	B3,4,7,8,10, 18,20, 21, 27,28,35,39, 42, 51,53 C36-46 D1,4,6	Plan the laboratory investigations for the diagnosis of infectious diseases(Maharashtra Univ)	5) Assess and analyze risks in the field of specialization
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology.	B1-4 B7-10 B18-32 B38-46 B50-54	Assess the reliability, results and relevance of research evidence; develop	6) Plan to improve performance in the field of specialization

5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections		effective approaches to use and monitor this evidence to improve health care (Liverpool Univ)	
1. Immunology 2. Nosocomial infection 3. Systematic bacteriology	B1, 11, 25,48,53	Operate routine and sophisticated instruments in the laboratory(Maharashtra Univ)	7) Make good decisions in different professional aspects
1. Systematic bacteriology. 2. Genetics. 3. Immunology	B17,26		8) Have innovation/creativity
1.General bacteriology. 2.Systematic bacteriology. 3.Microbial genetics. 4.Virology. 5. Mycology	B3, 4 B7-10 B12 B19-22 B24,25, 27, 28, 32, 36, 37, 43, 44, 46, 51,52 C1-C46	Perform and interpret immunological and serological tests(Maharashtra Univ)	9) Discuss and negotiate in high level of confidence based upon proofs and evidences

ج -المهارات العملية:

المقررات التي تحقق المعايير الأكاديمية للبرامج	مخرجات التعلم المستهدفة ILOs	(ARS) Benchmark	(NARS) المعايير القومية الأكاديمية القياسية العامة لبرامج قطاع الدراسات العليا
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	B1-54 D15-17 D21	To be equipped to play a role in amicrobiology laboratory in a university or a hospital (Liverpool Univ)	1) Apply modern and principle professional skills in the area of specialization
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.Nosocomial infections	B7,10 B18-21 B24,25,28 B32, 36,37 B40, 43, 44,53 C39-42 D7,9		2) Write and evaluate technical reports
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	B1, 3,4,8,9 B11-15 B17,18,23 B25-28, 30,31 B33,35,38,39, 42 B45-54 C36-46	Assess the reliability, results and relevance of research evidence; develop effective approaches to use andmonitor this evidence to improve	3) Adopt assessment methods and tools existing in the area of specialization.

		health care. (Liverpool Univ)	
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	D1-4 D10,12 D13-18	To develop key transferable skills in communication, information technology, numeracy, teamworking and self learning(Liverpool Univ)	4) Use of the appropriate technological means to serve the professional practice.
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	B3,4,7,8,10, 18,20, 21, 27,28,35,39, 42, 51,53 C36-46 D1,4,6	Plan the laboratory investigations for the diagnosis of infectious diseases(Maharashtra Univ)	5) Plan to improve the performance of the professional practice and development of the performance of others

د- مهارات الاتصال:

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1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	D2,3,6 D8-19	Understand and practice the principle of prevention and control of health care associated infections and rational antibiotic policy. (Maharashtra Univ)	1) Communicate effectively in different aspects
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	D2,3,10,14, 15	Develop microteaching skills and Pedagogy(Maharashtra Univ) Undertake teaching assignments in the subject of medical Microbiology(Maharashtra Univ)	2) Demonstrate efficient IT capabilities in such a way that serves in the development of the professional practice
1.Microbial genetics. 2.Immunology. 3.Mycology.	D2,3,10,14, 15	Develop microteaching skills and Pedagogy(Maharashtra Univ)	3) Manage the scientific meetings and manage time

4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections		Undertake teaching assignments in the subject of medical Microbiology(Maharashtra Univ)	
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6:General bacteriology. 7.Nosocomial infections	D8,10,12		4) Adopt self-assessment and Adopt life-long learning
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	D1,4		5) Use different resources for information and knowledge
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	D2,5,8,9,13,15,16	To develop key transferable skills in communication, information technology, numeracy, teamworking and self learning(Liverpool Univ)	6) Collaborate effectively within multidisciplinary team and lead team works
1.Microbial genetics. 2.Immunology. 3.Mycology. 4.Virology. 5.Systematic bacteriology. 6.General bacteriology. 7.Nosocomial infections	D5,6,8,9,10 D14-16 D19,20		7) Demonstrate a high level of competence in the management of time and scientific meetings

رئيس القسم
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