

Comparison of VUMIE Online Activities with Micro Digital Media 3/e Content

Activities in rows shaded gray are in development at this time.

Activities built into VUMIE Online software	MDM 3/e Equivalent for use with the VirtualUnknown Microbiology 2012 edition
Section 1 – Basic Microbiology Lab Skills	
• VUMIE Online Tour	1. The Virtual Lab
• Lab Safety	New
• Ubiquity	New
• Scavenger Hunt – Microbes Around Us	New
• Bacterial Growth	5. Bacteriological Growth Media and Growth Patterns
• Scavenger Hunt – Controlling Growth	New
• Colony Morphology – Coming Soon!	New
• Types of Growth Media	5. Bacteriological Growth Media and Growth Patterns
• Aseptic Tube-tube Transfers	2. Aseptic Tube-to-Tube Transfers
• Streaking Plates	3. Aseptic Tube-to-Plate Transfers
• Making Lawns	3. Aseptic Tube-to-Plate Transfers
• Scavenger Hunt – Microbial Anatomy	4. Bacterial Cell Anatomy and Arrangements
• Gram Stains	New
• Microscopy	New
• Anatomy, Shape, Arrangements – Coming Soon!	4. Bacterial Cell Anatomy and Arrangements
Section 2 – Testing and Identification	
• Selective & Differential Media	5. Bacteriological Growth Media and Growth Patterns 6. Controlling Microbial Growth
• Indicators and Reagents	5. Bacteriological Growth Media and Growth Patterns 6. Controlling Microbial Growth
• Scavenger Hunt – Microbial Physiology	New
• Sugar Fermentation Tests	12. Sugar Fermentation Tests
• Amino Acid Utilization	13. Metabolism of Amino Acids as Nutrients
• Video-based Tests <ul style="list-style-type: none"> ○ Catalase ○ Coagulase ○ Gelatinase ○ Oxidase ○ Motility 	16. Catalase Test New New 9. Oxidase and OF Glucose 4. Bacterial Cell Anatomy and Arrangement
• ID Strategies for Gram Negative Bacilli	8. Identifying Gram Negative Rods
• Isolation Media for Gram Negatives – Coming Soon!	New
• Triple Sugar Iron Agar	10. Triple Sugar Iron Agar
• IMViC Series	11. IMViC Series
• ID Strategies for Gram Positive Cocci	14. Identifying Gram Positive Cocci
• Isolation Media for Gram Positives – Coming Soon!	18. Mannitol Salt Agar and NEW
• Blood Hemolysis	15. Hemolysis of Blood Agar
• Bile Esculin Agar	17. Bile Esculin Test
Section 3 – Health Microbiology	
• Concepts of Health and Disease	New
• Infectious Disease and Epidemiology	21. Infectious Disease and Epidemiology
• Scavenger Hunt – Infectious Diseases	New
• Pathogenicity and Virulence	22. Pathogenicity and Virulence

• Innate Immune Defenses	23. Innate (Nonspecific) Defenses to Disease
• Adaptive Immune Defenses	24. Adaptive (Specific) Immune Response
• Scavenger Hunt – Immunity	New
• Cardiovascular System Infections	25. Infections of the Cardiovascular System
• Respiratory System Infections	26. Infections of the Respiratory System
• Digestive System Infections	27. Infections of the Digestive System
• Genitourinary System (UTI) Infections	28. Infections of the Respiratory & Urinary Systems
• Nervous System Infections	29. Infections of the Nervous System
• Nosocomial Infections	New
• Scavenger Hunt – More on Diseases	New
Section 4 – Additional Activities	
• Most Probable Number	New
• Principles of Hand Hygiene	New
• Kirby-Bauer Antibiotic Susceptibility Testing	7. Antimicrobial and Chemotherapeutic Agents
• Antiseptics and Disinfectants Testing	6. Controlling Microbial Growth and NEW
• Rapid ID Using Chromogenic Media – Coming Soon!	New
• Rapid ID Using Biochemical Test Panels	19. Rapid ID Systems for Bacterial Identification
• The Bacterial Growth Curve – Coming Soon!	New
• Save The Patient	20. Save The Patient!
• Creating Research Posters from VUMIE Online Unknowns	30. Creating Scientific Posters
• Fantasy Microbiology League	31. Fantasy Microbiology