## Class schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Module</th>
<th>Topic</th>
<th>Reading 14th</th>
<th>Reading 15th</th>
<th>File FS2017Mod-xx</th>
<th>MasteringMicrobiology assignment</th>
<th>In-class activity</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Introduction</td>
<td></td>
<td>a. Course introduction</td>
<td></td>
<td>Module 2 Pre Class Assignment Due before your class meeting</td>
<td>No activity</td>
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</tbody>
</table>
|      | 2      | Microscopy & Morphology of Bacteria | 2.1-2.6 | 1.5-1.8; 2.1 | a. Assigned Reading  
   b. Components of the Cytoplasmic Membrane  
   c. Staining Methods in Light Microscopy  
   d. Phase Contrast, Darkfield, and Fluorescence Microscopy  
   e. Electron Microscopy | Module 2 Pre Class Assignment Due before your class meeting | Week 2 In-Class Activity Covers modules 2-6 |
|      | 3      | Structure/Function of Bacteria 1. Cytoplasmic Membrane | 2.7-2.9 | 2.3; 3.2 | a. Components of the Cytoplasmic Membrane  
   b. Functions of the Cytoplasmic Membrane  
   c. Transport Across the Cytoplasmic Membrane | Module 3 Pre Class Assignment Due before your class meeting | |
|      | 4      | Structure/Function of Bacteria 2. Cell Wall | 2.10-2.12 | 2.4-2.6 | a. Differences Between Gram (+) and Gram (-) Cell Walls  
   b. Structure of Peptidoglycan  
   c. The Outer Membrane of Gram (-) Cells  
   d. Porins and Lipoprotein  
   e. Cell Walls of Archaea | Module 4 Pre Class Assignment Due before your class meeting | |
|      | 5      | Structure/Function of Bacteria 3: Internal Components | 2.13-2.16 | 2.8-2.10 | a. Introduction, Nucleoid, and Internal Flagella  
   b. Internal Storage Polymers and Gas Vesicles  
   c. Bacterial Endospores | Module 5 Pre Class Assignment Due before your class meeting | |
|      | 6      | Structure/Function of Bacteria 4: External Components and Motility | 2.17-2.19 | 2.7; 2.11-2.13 | a. Introduction, Capsules and Slime Layers  
   b. Fimbriae and Pili  
   c. Flagella and Motility  
   d. Chemotaxis | Module 6 Pre Class Assignment Due before your class meeting | |
|      | 7      | Metabolism 1: Bioenergetics and Fermentations | 3.3-3.9 | 3.3-3.9 | a. Basic Bioenergetics  
   b. Oxidation Reduction Reactions & Energy Yield  
   c. Electron Carriers and High Energy Bonds  
   d. Energy From Fermentation Pathways | Module 7 Pre Class Assignment Due before your class meeting | Week 3 In-Class Activity Covers modules 7-9 |
   b. Anaerobic Respiration  
   c. Bacterial Photosynthesis  
   d. Summary of Bioenergetics | Module 8 Pre Class Assignment Due before your class meeting | |
|      | 9      | Microbial Growth 1: Nutrition, Cultivation, and Enrichment | 3.1-3.2; 5.17; 18.1-18.2 | 3.1-3.2 | a. Nutrients and Growth Factors  
   b. Culture Media  
   c. Isolation of a Pure Culture and Enrichment Culture | Module 9 Pre Class Assignment Due before your class meeting | |
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<tr>
<td>Week 4</td>
<td>10</td>
<td>Microbial Growth 2: Cell Division and Population Measurement</td>
<td>5.1-5.4; 5.8-5.10</td>
<td>5.1-5.3; 5.5-5.8; 19.1</td>
<td>a Prokaryotic Cell Division b Growth and Cell Morphology c Growth of Peptidoglycan d Measurement of Cell Populations</td>
<td>Module 10 Pre Class Assignment Due before your class meeting</td>
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<tr>
<td>9/18- 9/22</td>
<td></td>
<td>11</td>
<td>Microbial Growth 3: Batch Culture</td>
<td>5.5-5.7</td>
<td>5.2-5.3</td>
<td>a Microbial Growth b Population Growth in Batch Culture c Fermentors for Batch Cultures</td>
<td>Module 11 Pre Class Assignment Due before your class meeting</td>
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<td>12</td>
<td>Microbial Growth 4: Temperature, pH, Osmotic, Oxygen</td>
<td>5.11-5.16</td>
<td>5.9-5.14</td>
<td>a Effects of Temperature on Microbial Growth b pH and Osmotic Effects on Growth c Effects of Oxygen on Microbial Growth</td>
<td>Module 12 Pre Class Assignment Due before your class meeting</td>
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<td>13</td>
<td>Microbial Growth Control: Radiation, Non-Chemotherapeutic Antimicrobials</td>
<td>5.18-5.19</td>
<td>5.15-5.17</td>
<td>a Control of Microbial Growth: UV and Ionizing Radiation b Sterilization of Gasses and Liquids by Filtration c Non-therapeutic Chemical Antimicrobial Agents d Measurement of Antimicrobial Activity</td>
<td>Module 13 Pre Class Assignment Due before your class meeting</td>
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<td>Week 5</td>
<td>14</td>
<td>No class meetings</td>
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<td></td>
<td>Exam 1 Covers modules 2-13 Sept. 27 6:30 pm; Secs. 740-742 BCC N130 Secs. 743-744 BCC N100</td>
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<td>9/25-9/29</td>
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<td>15</td>
<td>Microbial Genomics</td>
<td>6.1-6.4; 6.7; 6.10;6.12</td>
<td>9.1-9.3; 9.5-9.9</td>
<td>a The Genome and Information Storage and Retrieval b DNA Sequencing of Genomes c Evolution of Genomes d Using Genome Sequence Information to Analyze Gene Expression e Comparative Genomics</td>
<td>Module 14 Pre Class Assignment Due before your class meeting</td>
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<tr>
<td>10/2-10/6</td>
<td>16</td>
<td>Regulation of Metabolic Pathways</td>
<td>7.1-7.5; 7.7-7.9; 7.14-7.15; 7.17</td>
<td>6.1-6.4; 6.6-6.8; 6.11-6.12</td>
<td>a Transcriptional Regulation b Catabolite Repression c Quorum Sensing and Signal Transduction d Control of Translation e Feedback Inhibition of Enzyme Activity</td>
<td>Module 15 Pre Class Assignment Due before your class meeting</td>
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<td>16</td>
<td>Bacterial and Eukaryotic Viruses</td>
<td>8.1-8.10</td>
<td>8.1-8.8</td>
<td>a Characteristics of Viruses b Quantification of Viruses c Virus Life Cycles d Animal Viruses e Retroviruses</td>
<td>Module 16 Pre Class Assignment Due before your class meeting</td>
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| Week 7 | 17     | Bacterial Genetics 1: Mutations, Repair, Gene Transfer | 10.1-10.7    | 11.1-11.7    | a Introduction and Types of Mutations  
  b Mutagens  
  c DNA Repair  
  d Homologous Recombination  
  e Transformation | Module 17 Pre Class Assignment  
  Due before your class meeting | Module 17 Pre Class Assignment  
  Due before your class meeting |
|        | 18     | Bacterial Genetics 2: Transduction, Conjugation, CRISPR | 10.8-10.10; 10.12 | 11.8-11.9; 11.12 | a Transduction  
  b Conjugation  
  c Transposons and CRISPR | Module 18 Pre Class Assignment  
  Due before your class meeting | Module 18 Pre Class Assignment  
  Due before your class meeting |
  b Molecular Phylogeny  
  c Using Sequences to Infer Evolution  
  d Other Methods for Phylogeny | Module 19 Pre Class Assignment  
  Due before your class meeting | Module 19 Pre Class Assignment  
  Due before your class meeting |
| Week 8 | 20     | Archaea                                         | 2.12; 16.1-16.5; 16.9-16.13 | 2.6; 17.1-17.5; 17.8-17.12 | a Intro to Archaea and Halophiles  
  b Methanogens  
  c Adaptations of Archaea to Extreme Environments  
  d Adaptation to a High Temperature Life | Module 20 Pre Class Assignment  
  Due before your class meeting | Module 20 Pre Class Assignment  
  Due before your class meeting |
|        | 21     | Eukaryotic Microorganisms                        | 2.20-2.22; 17.1-17.5; 17.9-17.13 | 2.14-2.16; 18.1-18.4; 18.8-18.12 | a Overview of Eukaryotes and Endosymbiosis (clip)  
  b How Eukaryotic Cells Get Energy  
  c Fungi | Module 21 Pre Class Assignment  
  Due before your class meeting | Module 21 Pre Class Assignment  
  Due before your class meeting |
  b Culture-Independent Methods of Community Analysis  
  c Analysis of Community Diversity | Module 22 Pre Class Assignment  
  Due before your class meeting | Module 22 Pre Class Assignment  
  Due before your class meeting |
|        | 23     | Microbial Ecology 2: Surfaces and Aquatic        | 19.3-19.5; 19.8; 19.12-19.13 | 20.3-20.5; 20.8-20.14 | a Habitats and Niches  
  b Biofilms  
  c Microbial Ecology of Freshwater Environments  
  d Microbial Ecology of Marine Environments | Module 23 Pre Class Assignment  
  Due before your class meeting | Module 23 Pre Class Assignment  
  Due before your class meeting |
|        | 24     | Microbial Ecology 3: Soil Microbiology/Plant-Microbe Interactions | 3.17; 19.6; 22.3-22.5 | 14.6; 20.6; 23.3-23.4 | a Soil Microbiology  
  b Plants as Habitats for Microbes  
  c Legume Plant-Microbe N2-Fixing Symbiosis  
  d Fungal-Plant Root Symbiosis | Module 24 Pre Class Assignment  
  Due before your class meeting | Module 24 Pre Class Assignment  
  Due before your class meeting |
|        | 25     | Microbial Ecology 4: Biogeochemical cycles and Bioremediation | 20.1-20.3; 21.3-21.9 | 21.1-21.3; 22.3-22.5 | a The Carbon Cycle  
  b The Nitrogen Cycle  
  c Microbial Bioremediation | Module 25 Pre Class Assignment  
  Due before your class meeting | Module 25 Pre Class Assignment  
  Due before your class meeting |
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<tr>
<td>Week 10 10/30-11/3</td>
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<td>No class meetings</td>
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<td>Exam 2 Covers modules 14-25; Nov. 1 6:30 pm; Secs. 740-742 BCC N130 Secs. 743-744 BCC N100</td>
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<td>Week 11 11/6-11/10</td>
<td>26</td>
<td>Animal and Human Microbe Symbioses</td>
<td>22.6-22.12</td>
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<td>a Foregut and Hindgut Fermenters b The Microbiome c Examples of Symbioses in Invertebrates</td>
<td>Module 26 Pre Class Assignment Due before your class meeting</td>
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<tr>
<td>Week 11 11/6-11/10</td>
<td>27</td>
<td>Normal Human-Microbe Interactions</td>
<td>23.1-23.7</td>
<td>24.1-24.2</td>
<td>a Interactions of Microbes with Mucus Membranes and Skin b Dental Microbiology c The Intestinal Microbiome d The Respiratory Tract e Pathogenesis</td>
<td>Module 27 Pre Class Assignment Due before your class meeting</td>
<td>Week 11 In-Class Activity Covers modules 26-28</td>
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<td>Week 11 11/6-11/10</td>
<td>28</td>
<td>Virulence and Pathogenesis</td>
<td>23.8-23.12</td>
<td>24.1-24.10</td>
<td>a Pathogenesis b Exotoxins c AB Exotoxins d Tetanus, Botulism, and Enterotoxins e Endotoxins and Innate Immunity</td>
<td>Module 28 Pre Class Assignment Due before your class meeting</td>
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<td>Week 12 11/13-11/17</td>
<td>29</td>
<td>Clinical Microbiology 1: Growth-Dependent and Growth-Independent Methods</td>
<td>27.3-27.10</td>
<td>28.3-28.8</td>
<td>a Lab Safety and Collection of Specimens b Growth-Dependent Methods c Growth-Independent Methods: Antigen/Antibody Reactions d Growth-Independent Methods: PCR Methods</td>
<td>Module 29 Pre Class Assignment Due before your class meeting</td>
<td>Week 12 In-Class Activity Covers modules 29-31</td>
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<td>Week 12 11/13-11/17</td>
<td>30</td>
<td>Clinical Microbiology 2: Antibiotics</td>
<td>27.11-27.18</td>
<td>28.10-28.12</td>
<td>a Therapeutic Properties of Antibiotics b Growth Factor Analogs c Inhibitors of DNA Replication and Peptidoglycan Synthesis d Inhibitors of Ribosomes and Membrane Functions e Antibiotic Resistance</td>
<td>Module 30 Pre Class Assignment Due before your class meeting</td>
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<td>Week 12 11/13-11/17</td>
<td>31</td>
<td>Epidemiology 1: Basic Concepts</td>
<td>28.1-28.6</td>
<td>29.1-29.6</td>
<td>a Basic Concepts b Transmission of Infectious Diseases c Epidemic Curves d Herd Immunity and R0</td>
<td>Module 31 Pre Class Assignment Due before your class meeting</td>
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<td>Week 13 11/20-11/22 No class meetings</td>
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<td>Week 13 11/23-11/24 - University Holiday</td>
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<td>32</td>
<td>Epidemiology 2: Transmission Control, Evolution, Emerging Pathogens</td>
<td>27.2; 28.7-28.11</td>
<td>28.2; 29.7-29.8</td>
<td>a Reservoirs, Carriers, and Control of Transmission b Emerging/Nosocomial Infectious Diseases c Evolution of Emerging Antibiotic Resistance</td>
<td>Module 32 Pre Class Assignment Due before your class meeting</td>
<td>Week 14 In-Class Activity Covers modules 32-36</td>
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<td>33</td>
<td>Person-to-Person Microbial Diseases: Respiratory 1</td>
<td>29.1-29.4</td>
<td>30.1-30.4</td>
<td>a Basic Concepts: Respiratory Transmission b Strepococcal Diseases c Pertussis d Tuberculosis</td>
<td>Module 33 Pre Class Assignment Due before your class meeting</td>
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<td>34</td>
<td>Person-to-Person Microbial Diseases: Respiratory 2</td>
<td>29.6-29.8</td>
<td>30.6-30.8</td>
<td>a Viral Respiratory Pathogens: Chickenpox, Colds b Viral Respiratory Pathogens: Influenza - Virus structure c Influenza - Epidemiology</td>
<td>Module 34 Pre Class Assignment Due before your class meeting</td>
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<td>35</td>
<td>Person-to-Person Microbial Diseases: Direct Contact Transmission</td>
<td>29.9-29.14</td>
<td>30.9-30.10; 30.13-30.15</td>
<td>a Staphylococcus and Helicobacter b Bacterial Sexually-Transmitted Diseases c Viral Sexually-Transmitted Diseases</td>
<td>Module 35 Pre Class Assignment Due before your class meeting</td>
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<td>36</td>
<td>Vector-Transmitted and Soilborne Microbial Diseases</td>
<td>30.1; 30.3-30.4; 30.6-30.7; 30.9</td>
<td>31.1; 31.3-31.7; 31.9</td>
<td>a Basic Concepts b Animal and Vector-Transmitted Viral Diseases c Vector-Transmitted Bacterial Diseases d Infectious Diseases of Soil Origin</td>
<td>Module 36 Pre Class Assignment Due before your class meeting</td>
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<td>37</td>
<td>Waterborne and Foodborne Microbial Diseases 1</td>
<td>31.1-31.3; 31.5-31.13</td>
<td>32.1-32.2; 32.6-32.12</td>
<td>a Introduction to Food Preservation b Food Infection and Food Poisoning c Staphylococcus and Salmonella d E. coli and Campylobacter</td>
<td>Module 37 Pre Class Assignment Due before your class meeting</td>
<td>Week 15 In-Class Activity Covers modules 36-38</td>
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<tr>
<td></td>
<td>38</td>
<td>Waterborne and Foodborne Microbial Diseases 2</td>
<td>31.14</td>
<td>32.5</td>
<td>a Review of Serotypes, Genomes, and Pathogens b Investigation of Foodborne Outbreaks by Analyzing Genomes c Norovirus d Surveillance of Foodborne Illness e Cholera</td>
<td>Module 38 Pre Class Assignment Due before your class meeting</td>
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<td><strong>Finals week</strong></td>
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<td><strong>Exam 3 Covers only modules 26-37 Wed. Dec. 13: 10 am-noon; Rooms to be announced</strong></td>
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Introduction to MMG 301

• Welcome to MMG 301 Introductory Microbiology! The goal of this course is to help you, the student, develop a strong background in the fundamental processes of microorganisms and their effect on the larger world. You will develop this background by developing models of cellular and molecular processes in microbes as well as external forces that act on them. You will use a combination of sources to develop models of bacterial genetics and evolution, bacterial physiology and metabolism, microbial communities and ecology and microbial interactions with their host. These models, and the skills you use to develop them will assist you in future careers and daily life.

Evolution of the hybrid MMG 301

• MMG 301 is presented using a hybrid course structure. This means that part of the material is online, and part is in class. This allows students to have flexibility in their schedules, but allows the class to meet once per week for in-class assignments and active learning. Out of class, you will access video lectures, read resources provided by your instructors and complete activities to reinforce the concepts presented. In class will be almost entirely devoted to active learning, solving problems using the concepts that are covered in the online material. Therefore, it is vital that you work through the material before attending class. Doing so will allow you to receive the most benefits possible from the course. In addition to the online material and in-class meetings, there will be two evening midterm exams, and a non-comprehensive final exam.

• Presenting MMG 301 material in a hybrid is not new. Starting in 2011, recorded lectures were used as part of the summer off-campus sections. In Fall 2017, we are simply scaling up this concept to the entire class. Student feedback from the summer hybrid MMG 301 have been significantly higher than the traditional 3-times/week regular lecture format.

Faculty:

• Scott Mulrooney, Ph.D. mulroon2@msu.edu sections 740, 743, 744
• Patrick Bardill, Ph.D. bardilli@msu.edu sections 741, 742
  • TAs: Daniel Claiborne claibo12@msu.edu
  • Shreya Saha sahashre@msu.edu
  • Jackson Sorensen sorens75@msu.edu
• Additional faculty for selected class meetings: Jonathan Hardy, Ph.D. hardyjon@msu.edu
• Office hours – to be announced

Access to online course materials

• The course is divided into 15 weeks, and each week contains “modules”, with 2-4 modules.
• d2l.msu.edu: Each week has its own folder, which contains the module folders for that week
• Each module contains a Powerpoint file of lecture slides and links to video recordings of the individual module topics
  – Five sections (740-744) have been combined into a single D2L site:
    • “FS17-MMG-301-Merged – Introductory Microbiology”
• A computer with adequate internet connection is required to view the videos. If you have technical issues, contact the MSU IT services Distance Learning Support: 517-432-6200
• All recordings are captioned, and this can be turned on or off when viewing the video (click on the “cc” in the lower right of the video window)

The module concept

• Videos used in the online MMG 301 originated from the Fall 2016 lecture recordings, along with some newly recorded material. These have been broken into smaller pieces for easier viewing – ranging from 3-20 minutes. The videos were then arranged into groups called modules. Each module covers a major topic, and each individual video covers a subtopic.
Required: Mastering Microbiology for Pre-Class Assignments

• Mastering Microbiology is a required collection of online homework, tutorials, and animations that are provided by our textbook publisher, Pearson. Mastering can be purchased with, or without the eText book. No exam questions will come directly from the textbook, but information in the book will be helpful in understanding the material.

• Each section of MMG 301 has its own Mastering Microbiology course.

• MasteringMicrobiology WITH Pearson eText -- for Brock Biology of Microorganisms, 15th Edition
  • Madigan, Bender, Buckley, Sattley & Stahl ©2018 | Pearson | 1136 pp
  • ISBN 9780134603964 Electronic package with instant access. Only available from Pearson.com

• MasteringMicrobiology WITHOUT Pearson eText -- Instant Access -- for Brock Biology of Microorganisms, 15th Edition
  • Format: Website
  • ISBN 9780134602301 Instant access – only available from Pearson.com

• Modules will have an associated “Mastering Microbiology” online assignment. These are listed in the semester schedule in this syllabus.

Required Weekly In-Class Meetings (Class meetings begin week of Sept. 4)

• Nearly every week, each section will meet to do in-class activities. You will work in groups of 3-4 on a different assignment each week. Attendance is mandatory. You must attend only the section you are enrolled in. You will be required to view the module videos and complete pre-class assignments in MasteringMicrobiology before each in-class meeting. Approval to attend a different section’s meeting must have prior approval by Dr. Mulrooney or Dr. Bardill and will only be granted for medical reasons (with valid documentation) or University sanctioned events.

• You are free to use any resources while working on the problems in class. Please note that some problems have many solutions, as they ask you to design experiments. The instructors and the TAs will be present to help you work on the problems. If you have questions, do not hesitate to ask. Solutions to the problems will be posted on D2L on Friday.

• Grading will be based on observation of participation by instructors and TAs, and completion of required questions on group assignment sheets. In most cases, 100% will be given for reasonable efforts to provide answers for the questions on the assignment sheets.

Assessments

• Exams
  • Midterm exams take place at 6:30 pm on Sept. 27 and Nov. 1.
    • Sections 740, 741, 742: room BCC N130
    • Sections 743, 744: room BCC N100
  • Final exam Wednesday, Dec 13 2017 10:00am - 12:00pm: locations will be announced.
  • Exams are worth 60% of your grade.

• Pre-class online assignments in Mastering Microbiology
  • Each module will contain an assignment to be completed using the online Mastering before you come to the in-class session. These assignments are worth 20% of your grade and the lowest 2 will be dropped. You will have a maximum of 3 attempts per question.

• In-class group assignments These are worth 20% of your grade.
Strategies for success in the online MMG 301

• View all of the online videos for each module and follow along with the provided Powerpoint slides. The slides do not contain all the information you need. There is a lot of writing added to the slides during the recordings, and what is said and written can be tested on in the quizzes and midterm exams.

• **Keep up with the material** – do not wait until right before your weekly meeting to view the online material and do any required homework in Mastering.

• Although not required, the textbook can be a helpful resource, especially if you have not had BS 161 (or LB 145) here at MSU.

• There is a D2L discussion board for each week of the class. If you have a question about the course content, post your question there. Students are also encouraged to answer any questions they see on the discussions - the instructors or TAs will approve/edit student answers and then post them.

Study Guides and Vocabulary

• You will find “Study Guides” in a folder on D2L – one study guide for each exam. These are a list of concepts that are important. Study guides are not a list of possible exam questions, but are best used as concepts that should understood.

• Vocabulary words that you are expected to know are shown in **bold** in the Powerpoint slides.

Class Grading

• Three non-cumulative exams; Exams 1, 2, and 3: 100 points each of a mix of multiple choice and short answer questions: Makeup exams allowed only for qualified medical reasons.
  
  • **Nobody will be allowed to enter late and take the exam after the first person has finished**

  • Exam questions will come from:
  
    • Module recordings, including vocabulary words on slides (**in bold**)
    
    • Any possible “Microbes in the News” (see below)
      
      • Note: sometimes there are no significant news stories during the class, sometimes there will be several – it depends on what happens during the semester.

    • Any “Assigned Reading”: these may occasionally be posted on D2L (short readings from online content that are relevant to the module topics).

  • Grading on straight scale, **no curve**

  • Final grade is based on **percentage** using the formula below

  • Any fractional Mastering point totals will be **rounded up** when calculating final grade.

  • ≥92% = 4.0, ≥85% = 3.5, ≥78% = 3.0, ≥71% = 2.5, ≥65% = 2.0, ≥58% = 1.5, ≥50% = 1.0, below 50% = 0.0

  $$([(\text{Avg. \% on exams}) \times 0.6] + [(\text{avg \% on in-class assign.}) \times 0.2] + [(\text{avg. \% on Mastering}) \times 0.2] = \text{final \%}]$$
“What’s Going To Be On The Exams”

- **Anything in the online recordings**, including what is said or written on the slides by the instructor.
- **“Microbes in the News”** – recent news items may be added to modules: can be on exams
  - Links to news stories will be provided in the folder for each lecture on the course D2L web site – info in these news stories can be a source of exam questions
- **Assigned Reading**: may be added to D2L (there is already one for module 2) as needed, often to supplement a news story.

**Study Guides** – An aid for reviewing major concepts covered in the each module – they do not contain additional information you will need to know.

- The study guides are NOT a list of potential exam questions; The module material (including all “Microbes in the News” stories and “Assigned Reading”) are the sources of exam questions. Do not limit yourself by using only the study guides as your only way of preparing for exams.

**Student Integrity and Academic Honesty Statement**

- **“Academic Honesty**: Article 2.3.3 of the Academic Freedom Report states that “The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards.” In addition, the (insert name of unit offering course) adheres to the policies on academic honesty as specified in General Student Regulations 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations. (See Spartan Life: Student Handbook and Resource Guide and/or the MSU Web site: www.msu.edu.)

- Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including homework, lab work, quizzes, tests and exams, without assistance from any source. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the www.allmsu.com Web site to complete any course work in (insert course number here). Students who violate MSU academic integrity rules may receive a penalty grade, including a failing grade on the assignment or in the course. Contact your instructor if you are unsure about the appropriateness of your course work. (See also http://www.msu.edu/unit/ombud/dishonestyFAQ.html)

**Additional Information:**

- Online access begins 8/30/2017
- Class meetings begin week of 9/4 - 9/8/2017 (meeting day depends on what section you are in)
- Open adds end (8:00pm) 9/6/2017
- Last day to drop with refund (8:00pm) 9/25/2017
- Last day to drop with no grade reported (8:00pm) 10/18/2017
- Class Ends Week of 12/4 – 12/8/2017
- Final exam 12/13/2017 10:00am-noon; rooms to be announced

**Note:** The above schedule and policies are subject to change in the event of extenuating circumstances. Students will be notified by email of any significant changes