Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.
COURSE SYLLABUS
BIOL 204
MICROBIOLOGY FOR NURSING PROFESSIONALS

COURSE DESCRIPTION
An examination of the fundamental principles of microscopic organisms. Microorganisms are examined with regard to cell structure, growth, heredity, diversity, and epidemiology. The basic concepts of pathogenicity, immunology, human disease, and genetic engineering are presented. Restricted to online students with an RN license pursuing a BSN.

RATIONALE
This course confronts student nurses with the vast unseen microbial diversity that represents a critical factor in the health of their future patients. Understanding the fundamentals of microbes brings rationality to the design of standard clinical practices the student nurse regularly performs.

I. PREREQUISITE
For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASE
Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING
A. Computer with basic audio/video output equipment
B. Internet access (broadband recommended)
C. Microsoft Word
   (Microsoft Office is available at a special discount to Liberty University students.)
IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

A. Identify intelligent design, irreducible complexity in bacteria cells, and interwoven complexity in human tissues.

B. Discuss examples of intelligent design, irreducible complexity in bacteria cells, and interwoven complexity in human tissues.

C. Recognize clinically relevant microbes in a fallen world.

D. Recall how microbiologists have set about to control and treat pathogens for the good of mankind.

E. Demonstrate competence in microbiology lab skills, such as aseptic technique and culturing bacteria.

F. Demonstrate competence in communicating and documenting laboratory data, such as disc-diffusion data and measuring microbial growth via colony counts.

G. Demonstrate the use and limitations of the scientific method in the design of experiments.

H. Demonstrate the use and limitations of the scientific method in the conduction of experiments.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations/notes

B. Course Requirements Checklist

After reading the Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (4)

Discussion boards are collaborative learning experiences. Therefore, the student is required to create a thread in response to the provided topic for each Forum. Each thread must be at least 500 words, integrate information drawn from course-related information (books, articles, and presentations), and include the required quotations specified in each prompt. In addition to the thread, the student is required to reply to the thread of at least 1 classmate. Each reply must be at least 200 words and integrate information drawn from course-related information (books, articles, and presentations).
D. Mastering Microbiology Online Homework Assignments (8)

The student will go to http://www.masteringmicrobiology.com to complete a variety of assignments, including animations, videos, homework questions, simulations, and quizzes that correspond with the weekly textbook readings. The Mastering Microbiology website requires additional information from the student for setup purposes that can be found in Blackboard. All assignments are graded based on completion and can be repeated up to 30 times to reach a perfect score (most students only need between 2 and 5 tries). It is strongly recommended that these are completed prior to the quiz or exam due in the assigned modules/weeks.

E. Labs (9)

Lab exercise grades will be based on the quality of the student’s results and written interpretations of the labs. Labs must be ordered right away to ensure enough time for supplies to arrive for the first assignment. Labs are a necessary component to complete this course; all labs must be submitted to pass this course. Failure to submit lab work results in a failing grade.

F. Quizzes (4)

Beginning in Module/Week 1, quizzes will be administered in every other module/week. Quizzes will cover the material between exams and will predominantly contain multiple-choice questions. The student must be certain that he/she can accurately answer appropriate in-class and textbook questions before attempting these quizzes. The student will have 25 minutes to finish each quiz.

G. Exams (4)

Exams differ from quizzes in that they are comprehensive in nature, covering everything from the module/week prior to the exam and the module/week in which the exam is assigned. Exams will contain multiple-choice questions. The student will have 90 minutes to finish each exam.

VI. COURSE GRADING AND POLICIES

A. Points

<table>
<thead>
<tr>
<th>Course Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Requirements Checklist</td>
<td>10</td>
</tr>
<tr>
<td>Discussion Board Forums (4 at 45 points ea)</td>
<td>180</td>
</tr>
<tr>
<td>Mastering Microbiology (8)</td>
<td>210</td>
</tr>
<tr>
<td>Labs (9)</td>
<td>210</td>
</tr>
<tr>
<td>Quizzes (4 at 25 pts ea)</td>
<td>100</td>
</tr>
<tr>
<td>Exams (4 at 75 pts ea)</td>
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<tr>
<td><strong>Total</strong></td>
<td>1010</td>
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</tbody>
</table>

B. Scale

A = 900–1010   B = 800–899   C = 700–799   D = 600–699   F = 0–599
C. Late Assignment Policy

If the student is unable to complete an assignment on time, then he or she must contact the instructor immediately by email.

Assignments that are submitted after the due date without prior approval from the instructor will receive the following deductions:

1. Late assignments submitted within one week of the due date will receive a 10% deduction.
2. Assignments submitted more than one week late will receive a 20% deduction.
3. Assignments submitted two weeks late or after the final date of the course will not be accepted.
4. Late Discussion Board threads or replies will not be accepted.

Special circumstances (e.g. death in the family, personal health issues) will be reviewed by the instructor on a case-by-case basis.

C. Honor Code

We, the students, faculty, and staff of Liberty University, have a responsibility to uphold the moral and ethical standards of this institution and personally confront those who do not.

D. Academic Misconduct

This includes academic dishonesty, plagiarism, and falsification. See The Liberty Way for specific definitions, penalties, and processes for reporting.

E. Disability Assistance

Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.
### COURSE SCHEDULE

**BIOL 204**


<table>
<thead>
<tr>
<th>MODULE/ WEEK</th>
<th>READING &amp; STUDY</th>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| 1            | Gillen: ch. 3  
Hands-On Lab, Inc.: Labs 1–3  
Tortora et al.: chs. 1, 3–4, 6–7a  
5 presentations | Course Requirements Checklist  
DB Forum 1  
Mastering Microbiology 1  
Quiz 1 | 10  
45  
40  
25 |
| 2            | Hands-On Lab, Inc.: Labs 1–3  
Tortora et al.: chs. 7b–8  
4 presentations | Mastering Microbiology 2  
Labs 1–3  
Exam 1 | 20  
70  
75 |
| 3            | Gillen: chs. 1, 9  
Hands-On Lab, Inc.: Labs 4–6  
Tortora et al.: chs. 10, 12  
5 presentations | DB Forum 2  
Mastering Microbiology 3  
Quiz 2 | 45  
20  
25 |
| 4            | Hands-On Lab, Inc.: Labs 4–6  
Tortora et al.: chs. 13–14  
1 presentation | Mastering Microbiology 4  
Labs 4–6  
Exam 2 | 20  
70  
75 |
| 5            | Hands-On Lab, Inc.: Labs 7–9  
Tortora et al.: chs. 16–17  
2 presentations | DB Forum 3  
Mastering Microbiology 5  
Quiz 3 | 45  
20  
25 |
| 6            | Hands-On Lab, Inc.: Labs 7–9  
Tortora et al.: chs. 18–19  
1 presentation | Mastering Microbiology 6  
Labs 7–9  
Exam 3 | 20  
70  
75 |
| 7            | Tortora et al.: chs. 20–22  
1 presentation | DB Forum 4  
Mastering Microbiology 7  
Quiz 4 | 45  
30  
25 |
| 8            | Tortora et al.: chs. 23–26  
4 presentations | Mastering Microbiology 8  
Exam 4 | 40  
70  
75 |

**TOTAL** 1010

DB = Discussion Board

**NOTE:** Each course module/week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.