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

MATH 115-1
MATHEMATICS FOR LIBERAL ARTS

COURSE DESCRIPTION
A survey course for liberal arts majors including a review of algebra and an introduction to logic, probability and statistics, mathematical structure, problem solving, number theory, geometry and consumer applications.

RATIONALE
Since Mathematics for Liberal Arts is the only college mathematics course that many students take, it is designed to dispel the common opinion that mathematics is only arithmetic or algebra. Students will accumulate a basic working knowledge of several branches of mathematics.

I. PREREQUISITES
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.)
D. Scientific calculator

IV. MEASURABLE LEARNING OUTCOMES
Upon successful completion of this course, the student will be able to:
A. Utilize math strategies in problem solving.
B. Solve algebraic equations.
C. Apply logic to life situations.
D. Relate probability and statistics to elements of life.
E. Describe how number theory and mathematical structure work.
F. Analyze the elements inherent in geometry.
G. Integrate math concepts into one’s personal life situations.

V. MATH 115 CORE COMPETENCY LEARNING OUTCOMES

A. Solve problems (including word problems) utilizing arithmetic concepts and algebraic equations (Mathematics).
B. Interpret information presented in various graphs and diagrams (Mathematics).
C. Solve problems using insight or logical reasoning (Mathematics).
D. Recognize flaws and logical inconsistencies in an argument (Critical Thinking).

VI. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations
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 (3)
   There will be 3 Discussion Board Forums throughout this course. The student is required to provide a thread in response to the provided prompt for each forum. Each thread must be at least 200 words and demonstrate course-related knowledge. In addition to the thread, the student is required to reply to 2 other classmates’ threads. Each reply must be at least 50 words.
D. Homework Exercises (7)
   Using the MyMathLab software, the student will complete 7 Homework Exercises in this course. There will be a set of questions assigned for each of the Homework Exercises. A score of at least 80% must be attained in order to engage in the subsequent quizzes and tests.
E. Quizzes (4)
   The student will complete 4 quizzes in this course using the MyMathLab software. Each quiz will be open-book/open-notes, and will contain multiple-choice and short answer questions ranging from fact recall to the application of course material. Each quiz may be taken up to 2 times. Before the second attempt, the student must complete the review assignment and receive a score of at least 85%. *Both attempts must be completed by the deadline of the corresponding module/week.
F. Core Competency Quiz
   Prior to the Final Exam, the student must complete the Core Competency Quiz on the MyMathLab website. The purpose of this quiz is to demonstrate the student’s degree of mastery in comparison to national mathematical standards and Critical Thinking Core Competency Learning Outcomes.
G. Test/Final Exam Reviews (4)
Using the MyMathLab software, the student will complete a review prior to each test and the Final Exam. For each test, the student must first take a two-part Test Review and earn a score of at least 85% on the second part. The test will remain inaccessible until this minimum score is reached.

H. Tests (3)
The student will complete 3 open-book/open-notes tests throughout the course using the MyMathLab software. Tests are based on the Reading & Study material and homework assignments.

I. Final Exam
The student will complete a comprehensive, open-book/open-notes Final Exam in MyMathLab.

VII. 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 (3 at 30 pts ea)</td>
<td>90</td>
</tr>
<tr>
<td>Homework Exercises (7 at 15 pts ea)</td>
<td>105</td>
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<tr>
<td>Quizzes (4 at 40 pts ea)</td>
<td>160</td>
</tr>
<tr>
<td>Core Competency Quiz</td>
<td>30</td>
</tr>
<tr>
<td>Test/Exam Reviews (4 at 10 pts ea)</td>
<td>40</td>
</tr>
<tr>
<td>Tests (3 at 125 pts ea)</td>
<td>375</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
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</tbody>
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Total 1010

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.
D. Disability Assistance

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

## MATH 115-1


<table>
<thead>
<tr>
<th>MODULE/WEEK</th>
<th>READING &amp; STUDY</th>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| 1           | Miller et al.: chs. 1.1–2.4  
6 presentations  
3 websites | Course Requirements Checklist  
Class Introductions  
DB Forum 1  
Homework Exercises: chs. 1 & 2  
Quiz 1: chs. 1 & 2 | 10  
0  
30  
15  
40 |
| 2           | Miller et al.: ch. 3.1–3.6  
5 presentations | Homework Exercises: ch. 3  
Quiz 2: ch. 3 | 15  
40 |
| 3           | Miller et al.: ch. 6.1–6.5  
6 presentations | DB Forum 2  
Homework Exercises: ch. 6  
Test 1 Review  
Test 1 | 30  
15  
10  
125 |
| 4           | Miller et al.: ch. 7.1–7.7  
7 presentations | Homework Exercises: ch. 7  
Quiz 3: chs. 6 & 7 | 15  
40 |
| 5           | Miller et al.: ch. 9.1–9.4  
5 presentations | Homework Exercises: ch. 9  
Test 2 Review  
Test 2 | 15  
10  
125 |
6 presentations | DB Forum 3  
Homework Exercises: chs. 12 & 13.1–13.3  
Quiz 4: chs. 9, 12 & 13.1–13.3 | 30  
15  
40 |
| 7           | Miller et al.: ch. 13.4–13.5  
3 presentations | Homework Exercises: ch. 13.4–13.5  
Test 3 Review  
Test 3 | 15  
10  
125 |
| 8           | Miller et al.: Review all previously assigned materials  
Review presentations | Core Competency Quiz  
Final Exam Review  
Final Exam | 30  
10  
200 |

**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.**