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 <u>not</u> be used to purchase course materials.

LIBERTY UNIVERSITY

COURSE SYLLABUS

MATH 115

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 structures, problem solving, geometry and consumer applications.

RATIONALE

Since Math 115 is the only mathematics course that many students will take, it is designed to dispel the common notion that mathematics is only arithmetic or algebra. The student will obtain a basic working knowledge of several branches of mathematics. It will meet the general education requirement in mathematics for some majors. Math 115 is not the prerequisite for Math 121 (College Algebra), Math 201 (Statistics), or Math 117 (Elements of Mathematics).

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. RECOMMENDED RESOURCE – OPTIONAL

Miller, C. D., Heeren, V. E., & Hornsby, J. (2016). *Mathematical ideas – with MyMathLab* (13th ed.). Upper Saddle River, NJ: Pearson.

IV. ADDITIONAL MATERIALS FOR LEARNING

A. Computer with basic audio/video output equipment

B. Internet access (broadband recommended)

C. Please note, technical skills for this course include:

- Creating and submitting files in Microsoft Word and Excel
- Basic Blackboard navigation skills

D. The only permitted calculator is the Texas Instruments model 30 (TI-30). The TI-30 has several types each with their own letters after the 30. Any of the various types works well provided the model name begins with TI-30. Use of any other type of calculator is not permitted for this course and is therefore considered cheating and an honor code violation.

V. MEASURABLE LEARNING OUTCOMES

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

A. Demonstrate knowledge of the topics listed in the course description by solving problems in written form using proper mathematical notation and terminology.

B. Communicate math concepts accurately using vocabulary and symbolic language.

C. Apply math concepts to problems involving real life situations.

D. Demonstrate an appreciation of the diversity of mathematics and its applications.

VI. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations

B. Course Requirements Checklist

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

C. Course Introduction Quiz

The student must complete the Course Introduction Quiz in MyMathLab and must receive a score of 100% before he/she can start any of the other assignments in MyMathLab. This quiz will be open-book/open-notes and cover information from the Course Syllabus and announcements offered in Modules/Weeks 0 and 1. The student will receive unlimited attempts for this quiz.

D. Discussion Board Forums (3)

Discussion boards are collaborative learning experiences. Therefore, there will be 3 Discussion Board Forums throughout this course. The student is required to write 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.

E. Homework Exercises (7)

Using MyMathLab, 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 90% must be attained in order to engage in the subsequent quizzes and tests.

F. Test/Exam Reviews (4)

The student will complete a two-part review in MyMathLab prior to each test and the Final Exam. For each test or exam, the student must first complete the Review Check Up and then complete the Customized Review. The student must earn a score of at least 90% on the Customized Review. The test or exam will remain inaccessible until this minimum score is reached.

G. Quizzes (4)

The student will complete 4 quizzes in this course using MyMathLab. 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 90%. *Both attempts must be completed by the deadline of the corresponding module/week.

H. Core Competency Quiz

Prior to the Final Exam, the student must complete the Core Competency Quiz in MyMathLab. 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.

I. Tests (3)

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

J. Final Exam

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

VII. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist			10
Course Introduction Quiz			0
Discussion Board Forums	(3 at 30 pts ea)		90
Homework Exercises	(7 at 15 pts ea)		105
Test/Exam Reviews	(4 at 10 pts ea)		40
Quizzes	(4 at 40 pts ea)		160
Core Competency Quiz			30
Tests	(3 at 125 pts ea)		375
Final Exam			200
		Total	1010

B. Scale

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

C. Instructor Feedback and Response Time

Responses to student emails will be provided within 48 hours and assignment feedback will be given within 1 week from the assignment due date.

D. 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.

LIBERTY UNIVERSITY

COURSE SCHEDULE

MATH 115

Textbook: Miller et al., *Mathematical Ideas* (2016).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Miller et al.: chs. 1.1–2.4 6 presentations 3 websites	Course Requirements Checklist Class Introductions Course Introduction Quiz DB Forum 1 Homework Exercises: chs. 1–2 Quiz 1: chs. 1–2	10 0 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 1 website	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: ch. 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	Miller et al.: chs. 12.1–12.3, 13.1–13.3 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 Core Competency Quiz Test 3 Review Test 3	15 30 10 125
8	Miller et al.: Review all previously assigned materials 1 presentation Review all presentations	Final Exam Review Final Exam	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**.