**Course Syllabus**

|  |
| --- |
| **Course Code:** MATH 1001 |
| **Course Title:** Quantitative Reasoning |
| **Course Description:** This course places quantitative skills and reasoning in the context of experiences that Students are likely to encounter. It emphasizes processing information in context from a variety of representations, understanding of both the information and the processing, and understanding which conclusions can be reasonably determined. Topics include sets and set operations, logic, basic probability, data analysis, and algebraic modeling from data (including linear, quadratic, exponential and logarithmic models). |
| **Number of course credit hours:** 3 |
| **Total weekly contact hours:** 3 |
| **Pre-requisites/Co-requisites:** Students must have successfully passed, exempted out, or be co-requisitely enrolled in Learning Support Mathematics MATH 0997. |
| **Course Learning Outcomes (exactly as most recently approved by the College-wide Curriculum Committee:**  Quantitative Reasoning and Mathematics: quantitative reasoning and mathematics will be characterized by logic, critical evaluation, analysis, synthesis generalization, modeling, and verbal, numeric, graphical, and symbolic problem solving.  Competence within the context of collegiate general education objectives is defined by the following outcomes:   * Ability to model situations from a variety of settings in generalized mathematical forms; * Ability to express and manipulate mathematical information, concepts, and thoughts in verbal, numeric, graphical and symbolic form while solving a variety of problems; * Ability to solve multiple-step problems through different (inductive, deductive and symbolic) modes of reasoning; * Ability to properly use appropriate technology in the evaluation, analysis, and synthesis of information in problem-solving situations; * Ability to shift among the verbal, numeric, graphical and symbolic modes of considering relationships; * Ability to extract quantitative data from a given situation, translate the data into information in various modes, evaluate the information, abstract essential information, make logical deductions, and arrive at reasonable conclusions; * Ability to employ quantitative reasoning appropriately while applying scientific methodology to explore nature and the universe; * Ability to discern the impact of quantitative reasoning and mathematics on the sciences, society, and one's personal life. |
| **College Policy on Class Attendance:**  Courses at ABAC are provided for the intellectual growth and development of students. The interaction with instructors and other students is an essential element of the learning process, and a high correlation exists between class attendance and course grades. Therefore, to attain maximum success, students should attend all their classes, be on time, and attend all scheduled course activities. Absence from class does not excuse students from full responsibility for classwork or assignments missed. Students must accept this responsibility.  Individual instructors will establish attendance policies for each class, which are published in the course syllabus. The penalty for absences is at the discretion of the instructor and may include failure of the course. Students who stop attending class without [**officially withdrawing**](https://2022-2023-abac-catalog.coursedog.com/academic-policies-and-procedures/withdrawals) will receive a grade for the course.  <https://2022-2023-abac-catalog.coursedog.com/academic-policies-and-procedures/college-policy-on-class-attendance> |
| **Any applicable, Gen. Ed. Statement/Program assessment statement/Accrediting body statement**  **MATH 1001 Quantitative Reasoning**  **This is a Core IMPACTS course that is part of the STEM area.**  Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students’ broad academic and career goals.  This course should direct students toward a broad Orienting Question:   * How do I ask scientific questions or use data, mathematics, or technology to understand the universe?   Completion of this course should enable students to meet the following Learning Outcome:   * Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.   Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:   * Inquiry and Analysis * Problem-Solving * Teamwork |
| **College Policy on Academic Dishonesty:**  Academic irregularities include, but are not limited to, giving or receiving unauthorized assistance in the preparation of any academic assignment; taking or attempting to take, stealing, or otherwise obtaining in an unauthorized manner any material pertaining to the education process; selling, giving, lending, or otherwise furnishing to any person any question and/or answers to any examination known to be scheduled at any subsequent date; fabricating, forging, or falsifying lab or clinical results; plagiarism in any form related to themes, essays, term papers, tests, and other assignments; breaching any confidentiality regarding patient information.  <https://2022-2023-abac-student.coursedog.com/sisc/academic/dishonesty> |

**SYLLABUS**

|  |
| --- |
| **Course Code:** MATH 1001 |
| **Course CRN:**  CRN 30243: TR 9:30am to 10:45am in Health Science/Nursing 242 CRN 30245: MW 2:00pm to 3:15pm in Health Science/Nursing 242 |
| **Instructor’s Name:** Dr. April Abbott |
| **Instructor’s Email:** aabbott@abac.edu |
| **Instructor’s Office Location:** Britt 225A (by the baboon) |
| **Instructor’s Office Hours:** See hours in GeorgiaView. |
| **Required textbooks and course materials:** This class uses a free workbook: Quantitative Reasoning Workbook (located as a pdf on GeorgiaView). Students may print out their own copy or printed, hole-punched copies can be purchased from the bookstore for $10.  Students are required to have a graphing calculator. TI-83, 83+, 84, 84+ are preferred; the instructor cannot help with technical issues with other graphing calculators. |
| **List of course topics and/or a detailed course schedule:**  Chapter 1: Problem Solving  Chapter 2: Algebra Equations and Graphs  Chapter 3: Set Theory  Chapter 4: Logic  Chapter 5: Counting Methods  Chapter 6: Probability  Chapter 7: Descriptive Statistics |
| **Course Assessments (linked to the course learning outcomes they assess):**    Online and written homework for Chapter 1, 2, 3, 4, 5, 6, & 7  Quiz for Chapter 1, 2, 3, 4, 5, 6, & 7  Exams over Chapters 1&2, Chapters 3&4, Chapters 5&6, and Chapter 7  Comprehensive final exam |
| **Attendance Policies:**  Courses at ABAC are provided for the intellectual growth and development of students. The interaction with instructors and other students is an essential element of the learning process, and a high correlation exists between class attendance and course grades. Therefore, to attain maximum success, students should attend all their classes, be on time, and attend all scheduled course activities. Absence from class does not excuse students from full responsibility for classwork or assignments missed. Students must accept this responsibility.  **Individual instructors will establish attendance policies for each class, which are published in their (Section B) course syllabus**. The penalty for absences is at the discretion of the instructor and may include failure of the course. Students who stop attending class, without **officially withdrawing**, will receive a grade for the course.  <https://2022-2023-abac-catalog.coursedog.com/academic-policies-and-procedures/college-policy-on-class-attendance> |
| **Grading Policy:**  This course is based off a point’s system of 1000 total points.  Unit Exams: 4 exams at 125 points 500 points total  Online HW: 100 pts  Written HW: 120 pts  Quizzes: 80 pts  Final Exam: 200 pts  A – 900-1000 points  B – 800-899 points  C – 700-799 points  D – 600-699 points  F – Below 600 points |
| **College Policy on Academic Dishonesty:**  Academic irregularities include, but are not limited to, giving or receiving unauthorized assistance in the preparation of any academic assignment; taking or attempting to take, stealing, or otherwise obtaining in an unauthorized manner any material pertaining to the education process; selling, giving, lending, or otherwise furnishing to any person any question and/or answers to any examination known to be scheduled at any subsequent date; fabricating, forging, or falsifying lab or clinical results; plagiarism in any form related to themes, essays, term papers, tests, and other assignments; breaching any confidentiality regarding patient information.  <https://2022-2023-abac-student.coursedog.com/sisc/academic/dishonesty> |
| **Accommodation for Disabilities:**  If you qualify for accommodations because of a disability, please submit your accommodation letter from Accommodation & Disability Services (ADS) to your instructor in a timely manner so that your needs can be addressed. ADS determines accommodations based on documented disabilities in the academic environment. If you have or experience a *temporary* medical condition that develops during the semester, contact ADS to discuss your needs. Information on requesting accommodations is located on the ADS website. Contact ADS at (229) 391-5132 or [ads@abac.edu](mailto:ads@abac.edu) for further assistance and questions.  **Mental Health Support:**  As a student, you may experience a range of stressors that can cause barriers to your learning and impact your overall health. These might include anxiety, high levels of stress, depression, trauma, and strained relationships. The ABAC Counseling Center, located in Branch Hall, Suite 201, is here to help with these or other issues you may experience. Free, confidential counseling is available on campus for enrolled students and can be accessed by visiting [www.abac.edu/counseling-center/](http://www.abac.edu/counseling-center/). Help is available by contacting the Counseling Center at (229) 391-5135 or emailing [counseling@abac.edu](mailto:counseling@abac.edu). |

**2025 Spring TENTATIVE SCHEDULE**

**MATH 1001 Quantitative Reasoning (T & TH)**

|  |  |
| --- | --- |
| **TUESDAY** | **THURSDAY** |
| **First Class** 1/07/2025 | 1/9/2025 |
| Chapter 1.1, 1.2 | Chapter 1.3, 2.1 |
| Roster Verification 1/14/2025 | 1/16/2025 |
| Chapter 2.1, 2.2 | Chapter 2.3 |
| 1/21/2025 | 1/23/2025 |
| Chapter 2.4, 2.5 | Chapter 2.5 |
| 1/28/2025 | 1/30/2025 |
| Chapter 2.6 | Review |
| 2/4/2025 | 2/6/2025 |
| **Test 1** | Chapter 3.1, 3.2 |
| 2/11/2025 | 2/13/2025 |
| Chapter 3.3 | Chapter 3.4 |
| 2/18/2025 | 2/20/2025 |
| Chapter 4.1, 4.2 | Chapter 4.3 |
| 2/25/2025 | Withdraw Deadline 2/27/2025 |
| Chapter 4.4, 4.5 | Review |
| 3/4/2025 | 3/6/2025 |
| **Test 2** | Chapter 5.1, 5.2 |
| 3/11/2025 | 3/13/2025 |
| Chapter 5.3, 5.4 | Chapter 6.1 |
| 3/18/2025 | 3/20/2025 |
| Spring Break | Spring Break |
| 3/25/2025 | 3/27/2025 |
| Chapter 6.2 | Chapter 6.3 |
| 4/1/2025 | 4/3/2025 |
| Chapter 6.4 | Review |
| 4/8/2025 | 4/10/2025 |
| **Test 3** | Chapter 7.1, 7.2 |
| 4/15/2025 | 4/17/2025 |
| Chapter 7.3, 7.4 | Review |
| 4/22/2025 | 4/24/2025 |
| **Test 4** | Review for Final |
| **Last Class** 4/29/2025 |  |
| Review for Final | Finals Week |

**FINAL: Tuesday May 6th 2025 from 8am to 10am.**

**2025 Spring TENTATIVE SCHEDULE**

**MATH 1001 Quantitative Reasoning (M & W)**

|  |  |
| --- | --- |
| **MONDAY** | **WEDNESDAY** |
|  | **First class** 1/8/2025 |
|  | Chapter 1.1, 1.2 |
| Drop/Add 1/13/2025 | 1/15/2025 |
| Chapter 1.3, 2.1 | Chapter 2.1, 2.2 |
| 1/20/2025 | 1/22/2025 |
| MLK Holiday | Chapter 2.3 |
| 1/27/2025 | 1/29/2025 |
| Chapter 2.4, 2.5 | Chapter 2.5, 2.6 |
| 2/3/2025 | 2/5/2025 |
| Review | **Test 1** |
| 2/10/2025 | 2/12/2025 |
| Chapter 3.1, 3.2 | Chapter 3.3 |
| 2/17/2025 | 2/19/2025 |
| Chapter 3.4 | Chapter 4.1, 4.2 |
| 2/24/2025 | 2/26/2025 |
| Chapter 4.3 | Chapter 4.4, 4.5 |
| 3/3/2025 | 3/5/2025 |
| Review | **Test 2** |
| 3/10/2025 | 3/12/2025 |
| Chapter 5.1, 5.2 | Chapter 5.3, 5.4 |
| 3/17/2025 | 3/19/2025 |
| Spring Break | Spring Break |
| 3/24/2025 | 3/26/2025 |
| Chapter 6.1, 6.2 | Chapter 6.3 |
| 3/31/2025 | 4/2/2025 |
| Chapter 6.4 | Review |
| 4/7/2025 | 4/9/2025 |
| **Test 3** | Chapter 7.1, 7.2 |
| 4/14/2025 | 4/16/2025 |
| Chapter 7.3, 7.4 | Review |
| 4/21/2025 | 4/23/2025 |
| **Test 4** | Final Review |
| **Last class**  4/28/2025 |  |
| Final Review | Final Week |

**FINAL: Monday May 5th 2025 from 2:45pm to 4:45pm**