

Six-Week Pacing Guide: Applied Probability and Statistics

This is the pacing guide/checklist for the topics and tasks recommended for each week of this course. Download and save or print this checklist to track your progress. This course is designed to take a new learner approximately 15–20 hours of work per week. Keep in mind that the amount of work assigned to each week will vary. Plan your schedule accordingly and carry tasks over into the subsequent week if necessary.

This pacing guide reflects a **six-week study plan**. An accelerated <u>three-week study plan</u> and a <u>checklist</u> (without time references) are also available. If you choose one of these options, we strongly suggest contacting a course instructor.

BEFORE Week 1

MATH FUNDAMENTALS

Main Focus:

Module 1 – Basic Numeracy and Calculation Skills; Goal Setting

Preparation Tasks:

- □ Meet with your community of care.
 - □ Collaborate with your program mentor and course instructor to schedule your objective assessment date for six weeks from now.
 - □ If you have previous experience with applied probability and statistics, speak with a course instructor about taking the pre-assessment. If you do take the pre-assessment, use the Coaching Report and the guidance of a course instructor to target your engagement with the learning resource.
 - Download <u>How to Succeed in Applied Probability and Statistics</u>, which includes information on contacting course instructors, best practices for studying, key rules, and formulas.
 - □ Meet with a course instructor to discuss tips to get started by <u>booking an appointment</u> or connecting through <u>Live Instructor Support</u>. To learn more, watch this short <u>video</u>.

- Complete Module 1: Basic Numeracy and Calculation Skills
 - □ Read Real Numbers: 1.01 through 1.05 and complete review checkpoints.
 - □ Read Basic Mathematical Operations I: 1.06 through 1.13 and complete review checkpoints.
 - □ Read Basic Mathematical Operations II: 1.14 through 1.18 and complete review checkpoints.
 - □ Complete activities 1.19–1.21.
 - Attempt to pass one of the three problem sets on pages 1.22–1.24 with a score of 80% or higher without using any notes or outside resources. If you score below 80%, review the course material and meet with a course instructor before attempting a *different* problem set. If you score 80% or higher or if you attempt all three problem sets, this step is done.
 - □ Complete the Module 1 Review test 1.25 with an 80% or better. (You have a limited number of attempts.)

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Week 1 – Math Fundamentals & Basic Algebra

Main Focus:

Module 2 - Fractions, Decimals & Percentages, Module 3 - Basic Algebra

Tasks:

- Complete <u>Module 2: Fractions, Decimals, & Percentages</u>
 - □ Read Fractions: 2.01 through 2.07 and complete review checkpoints.
 - □ Read Decimal: 2.08 through 2.11 and complete review checkpoints.
 - □ Read Ratios, Proportions, & Percents: 2.12 through 2.15 and complete review checkpoints.
 - □ Complete activities 2.16–2.17
 - □ Attempt to pass one of the three problem sets on pages 2.18–2.20 with a score of 80% or higher without using any notes or outside resources. If you score below 80%, review the course material and meet with a course instructor before attempting a *different* problem set. If you score 80% or higher or if you attempt all three problem sets, this step is done.
 - □ Complete the Module 2 Review test 2.21 with an 80% or better. (*You have a limited number of attempts.*)

Complete Module 3: Basic Algebra

- Recommended: Download the Module 3 Recorded Cohort notes (<u>Part 1</u> and <u>Part 2</u>) and watch the Module 3 Recorded Cohort videos (<u>Part 1</u> and <u>Part 2</u>).
- □ Read Algebraic Expressions: 3.01 through 3.08 and complete review checkpoints.
- □ Read Linear Equations: 3.09 through 3.15 and complete review checkpoints.
- □ Read Coordinate Plane: 3.16 through 3.19 and complete review checkpoints.
- Complete activities 3.20–3.22
- □ Attempt to pass one of the three problem sets on pages 3.23–3.25 with a score of 80% or higher without using any notes or outside resources. If you score below 80%, review the course material and meet with a course instructor before attempting a *different* problem set. If you score 80% or higher or if you attempt all three problem sets, this step is done.
- □ Complete the Module 3 Review test 3.26 with an 80% or better. (*You have a limited number of attempts.*)

Week 2 – Descriptive Statistics

Main Focus:

Module 4 – Descriptive Statistics for a Single Variable

- Complete Module 4: Descriptive Statistics for a Single Variable
 - Recommended: Download the Module 4 Recorded Cohort notes (<u>Part 1</u> and <u>Part 2</u>) and watch the Module 4 Recorded Cohort videos (<u>Part 1</u> and <u>Part 2</u>).
 - $\hfill\square$ Read Numerical Measures: 4.01 through 4.06 and complete review checkpoints.
 - □ Read Graphical Displays: 4.07 through 4.09 and complete review checkpoints.
 - □ Complete activities 4.10–4.12
 - □ Complete problem sets 4.13–4.15 Attempt to pass one of the three problem sets on pages 4.13–4.15 with a score of 80% or higher without using any notes or outside resources. If you score below 80%, review the course material and meet with a course instructor before attempting a *different* problem set. If you score 80% or higher or if you attempt all three problem sets, this step is done.
 - □ Complete the Module 4 Review test 4.16 with an 80% or better. (*You have a limited number of attempts.*)



Week 3 - Descriptive Statistics II

Main Focus:

Module 5 – Descriptive Statistics for Two Variables

Tasks:

- Complete Module 5: Descriptive Statistics for Two Variables
 - Recommended: Download the <u>Module 5 Recorded Cohort notes</u> and watch the <u>Module 5 Recorded</u> <u>Cohort video.</u>
 - □ Read Role-type Classification of Two Variables: 5.01 through 5.05 and complete review checkpoints.
 - □ Read Two Quantitative Variables: 5.06 through 5.08 and complete review checkpoints.
 - □ Complete activities 5.09–5.10
 - □ Attempt to pass one of the three problem sets on pages 5.11–5.13 with a score of 80% or higher without using any notes or outside resources. If you score below 80%, review the course material and meet with a course instructor before attempting a *different* problem set. If you score 80% or higher or if you attempt all three problem sets, this step is done.
 - □ Complete the Module 5 Review test 5.14 with an 80% or better. (*You have a limited number of attempts.*)

Week 4 – Correlation & Regression

Main Focus:

Module 6 – Correlation & Regression

- Complete <u>Module 6: Correlation & Regression</u>
 - Recommended: Download the <u>Module 6 Recorded Cohort notes</u> and watch the <u>Module 6 Recorded</u> <u>Cohort video.</u>
 - □ Read Causation: 6.01 through 6.05 and complete review checkpoints.
 - □ Read Regression: 6.06 through 6.08. Complete review checkpoints.
 - □ Read Correlation: 6.09 and complete review checkpoints.
 - Complete activities 6.11–6.13
 - □ Attempt to pass one of the three problem sets on pages 6.14–6.16 with a score of 80% or higher without using any notes or outside resources. If you score below 80%, review the course material and meet with a course instructor before attempting a *different* problem set. If you score 80% or higher or if you attempt all three problem sets, this step is done.
 - □ Complete the Module 6 Review test 6.17 with an 80% or better. (*You have a limited number of attempts.*)



Week 5 - Probability

Main Focus:

Module 7 – Probability

Tasks:

- Complete <u>Module 7: Probability</u>
 - Recommended: Download the Module 7 Recorded Cohort notes (Part 1, Part 2, Part 3, and Part 4) and watch the Module 7 Recorded Cohort videos (Part 1, Part 2, Part 3, and Part 4).
 - □ Read Theoretical and Empirical Probability: 7.01 through 7.04 and complete review checkpoints.
 - □ Read Sample Spaces and Events: 7.05 and complete review checkpoints.
 - □ Read Finding Probability of Events: 7.06 through 7.08 and complete review checkpoints.
 - □ Read Independence and Dependence: 7.09 through 7.13 and complete review checkpoints.
 - □ Complete activities 7.14–7.15
 - □ Attempt to pass one of the three problem sets on pages 7.16–7.18 with a score of 80% or higher without using any notes or outside resources. If you score below 80%, review the course material and meet with a course instructor before attempting a *different* problem set. If you score 80% or higher or if you attempt all three problem sets, this step is done.
 - □ Complete the Module 7 Review test 7.19 with an 80% or better. (*You have a limited number of attempts.*)

Week 6 – Objective Assessment

- □ Review course materials to prepare for the objective assessment.
- □ Take the pre-assessment.
- □ If you have already attempted the pre-assessment, we encourage you to take it again. There is value added in retaking the pre-assessment, as this can help you prepare to be successful on the objective assessment.
- □ Use the Coaching Report and the guidance of a course instructor to target your studying.
- □ Complete the objective assessment.