Data Science: Probability

**Welcome to Data Science: Probability!**

This is the **third** course in HarvardX's multi-part [Data Science Professional Certificate](https://www.edx.org/professional-certificate/harvardx-data-science) series.

**Course textbook**

There is a free textbook available for this course series. You can get a [PDF version of the textbook](https://leanpub.com/datasciencebook) on Leanpub or follow links within the course to the [HTML version of the textbook](https://rafalab.github.io/dsbook/). The textbook is also [available in Spanish](https://leanpub.com/dslibro) from Leanpub as well. You can also download the [R markdown files for the textbook](https://github.com/rafalab/dsbook) to run on your own machine at Professor Irizarry's GitHub repository.

**Getting help**

Are you new to edX? Check out edx's [Demo Course](https://www.edx.org/course/demox-edx-demox-1-0)!

Need platform-related help? Visit edX Support via the Support tab or [visit the Help Center](https://support.edx.org/hc/en-us).

Need content- or course-related help? Check out the course discussion forum first. If needed, you can also reach out on Twitter to Prof. Irizarry [@rafalab](https://twitter.com/rafalab) or to the course team [@HXDataScience](https://twitter.com/HXDataScience).

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Thank you for taking the Probability course!

- The PH125x Course Team

Introduction and Welcome, Completed section

 [Introduction and Welcome](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@100a88fff64f4c2ab1ea45c2a07d6507), Completed

  [Introduction to Probability](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@b6e81560454c4af7a7d89222d36ed78f), Completed

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[0.1 Important Pre-Course Survey](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@fd5caa011b024dbe923fa0d69ae7e355), Completed

 Section 1: Discrete Probability, Completed section

 [Section 1 Overview](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@83de0197ed7d46c3b8e1ad3810863ba0), Completed

  [1.1 Introduction to Discrete Probability (4 Questions)](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@1976a4117b50412ab72109415c674198), Completed

Assessment due Apr 1, 2024, 8:27 AM GMT+3

  [1.2 Combinations and Permutations](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@b1ea2c318d8e495eaa7d51942b6626f6), Completed

Assessment due Apr 1, 2024, 8:27 AM GMT+3

  [1.3 Addition Rule and Monty Hall](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@f213f32e527043ec8c0718cf398fae49), Completed

Assessment due Apr 1, 2024, 8:27 AM GMT+3

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[1.4 Assessment: Discrete Probability (26 Questions)](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@5fb5c4bd901649c78789d9bd467d163a), Completed

Assessment due Apr 1, 2024, 8:27 AM GMT+3

 Section 2: Continuous Probability, Completed section

 [Section 2 Overview](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@2e250117640043129173cecd317708b7), Completed

  [2.1 Continuous Probability](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@a90cf02b5930452b94f4f18f1a3f91ef), Completed

Assessment due Apr 12, 2024, 1:15 PM GMT+3

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[2.2 Assessment: Continuous Probability (13 Questions)](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@bf6b2a8baf1e403b8117fd03f7263d66), Completed

Assessment due Apr 12, 2024, 1:15 PM GMT+3

 Section 3: Random Variables, Sampling Models, and the Central Limit Theorem, Completed section

 [Section 3 Overview](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@73fb4535dab44db3adacd3bc991f97ee), Completed

  [3.1 Random Variables and Sampling Models](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@3901333598734983b099cb1cd0075a5e), Completed

Assessment due Apr 23, 2024, 6:03 PM GMT+3

  [3.2 The Central Limit Theorem Continued](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@2e738fee07c94db2912c38e66353352c), Completed

Assessment due Apr 23, 2024, 6:03 PM GMT+3

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[3.3 Assessment: Random Variables, Sampling Models, and the Central Limit Theorem (15 Questions)](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@6fdf5ba84cc74f039a5a9723d475af59), Completed

Assessment due Apr 23, 2024, 6:03 PM GMT+3

 Section 4: The Big Short, Incomplete section

 [Section 4 Overview](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@633a082a127c45f39f958ce070101641), Completed

  [4.1 The Big Short](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@b724e248134849859d3941a9982d6630), Completed

Assessment due May 4, 2024, 10:51 PM GMT+3

  [4.2 Assessment: The Big Short](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@3411e5479946463e84aa8a8620b2d86f), Incomplete

Final Assessment due May 4, 2024, 10:51 PM GMT+3

 [End of Course Survey](https://learning.edx.org/course/course-v1:HarvardX+PH125.3x+3T2023/block-v1:HarvardX+PH125.3x+3T2023+type@sequential+block@ae7c531d48ac4c9a84fca33764ed0095), Completed