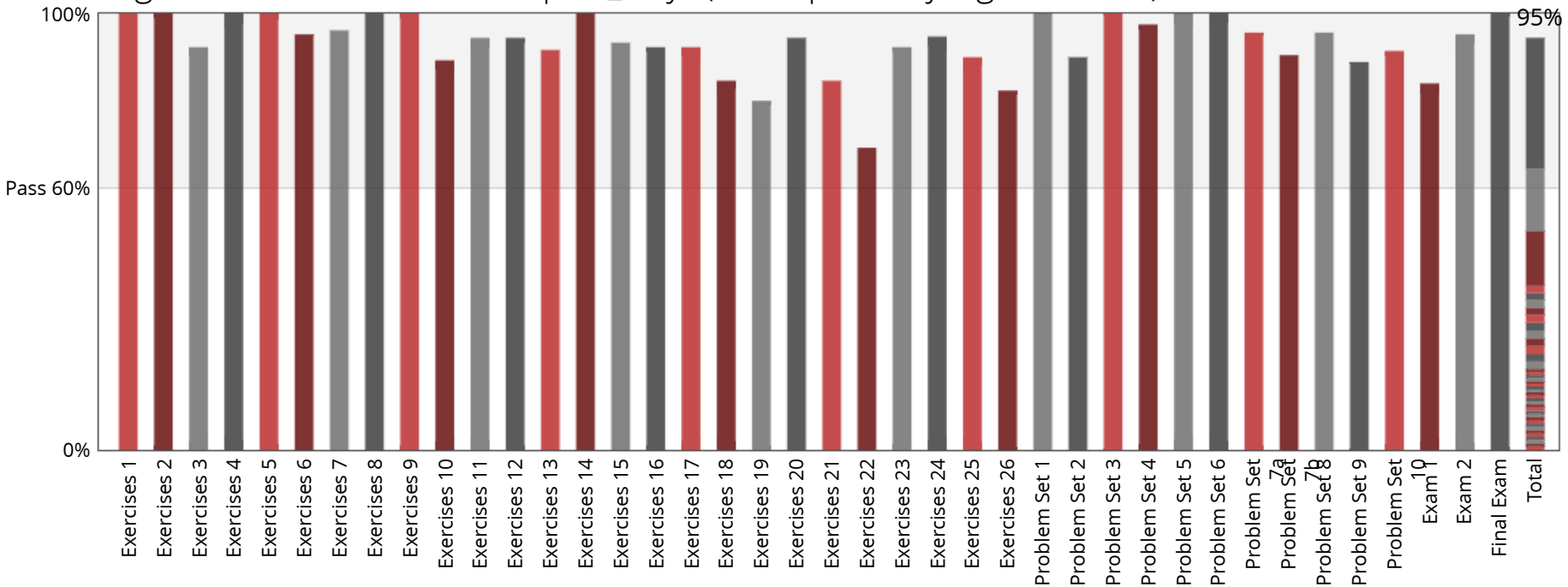
MITx: 6.041x Introduction to Probability - The Science of Uncertainty

Course Progress for Student 'sandipan_dey' (sandipan.dey@gmail.com)



Unit 0: Overview

Lec. 0: Course overview

No problem scores in this section

Course introduction, objectives, and study guide

No problem scores in this section

Syllabus, calendar, and grading policy

No problem scores in this section

edX Tutorial

No problem scores in this section

Discussion forum and collaboration guidelines

No problem scores in this section

Homework mechanics and standard notation

No problem scores in this section

Textbook information

No problem scores in this section

Entrance Survey

Important Preliminary Survey

No problem scores in this section

Unit 1: Probability models and axioms

Lec. 1: Probability models and axioms (19/19) 100%

Exercises 1 *due Feb 10, 2016 at 23:59 UTC*

Problem Scores: 2/2 1/1 1/1 4/4 2/2 2/2 3/3 1/1 1/1 2/2

Mathematical background: Sets; sequences, limits, and series; (un)countable sets.

No problem scores in this section

Solved problems

No problem scores in this section

Problem Set 1 (21/21) 100%
Problem Set 1 *due Feb 10, 2016 at 23:59 UTC*

Problem Scores: 5/5 3/3 4/4 3/3 6/6

Unit 2: Conditioning and independence

Unit overview

No problem scores in this section

Lec. 2: Conditioning and Bayes' rule (14/14) 100%
Exercises 2 *due Feb 17, 2016 at 23:59 UTC*

Problem Scores: 2/2 2/2 4/4 2/2 4/4

Lec. 3: Independence (12/13) 92%
Exercises 3 *due Feb 17, 2016 at 23:59 UTC*

Problem Scores: 1/1 1/1 2/2 1/1 2/2 1/2 4/4

Solved problems

No problem scores in this section

Problem Set 2 (18/20) 90%
Problem Set 2 *due Feb 17, 2016 at 23:59 UTC*

Problem Scores: 3/4 4/4 5/6 6/6

Unit 3: Counting

Lec. 4: Counting (14/14) 100%
Exercises 4 *due Feb 24, 2016 at 23:59 UTC*

Problem Scores: 3/3 2/2 2/2 2/2 2/2 3/3

Solved problems

No problem scores in this section

Problem Set 3 (17/17) 100%

Problem Set 3 *due Feb 24, 2016 at 23:59 UTC*

Problem Scores: 2/2 4/4 2/2 4/4 5/5

Unit 4: Discrete random variables

Unit overview

No problem scores in this section

Lec. 5: Probability mass functions and expectations (21/21) 100%

Exercises 5 *due Mar 02, 2016 at 23:59 UTC*

Problem Scores: 2/2 2/2 2/2 2/2 2/2 2/2 1/1 3/3 2/2 3/3

Lec. 6: Variance; Conditioning on an event; Multiple r.v.'s (20/21) 95%

Exercises 6 *due Mar 02, 2016 at 23:59 UTC*

Problem Scores: 1/1 1/1 2/2 2/2 2/2 2/2 2/2 5/6 1/1 2/2

Lec. 7: Conditioning on a random variable; Independence of r.v.'s (25/26) 96%

Exercises 7 *due Mar 02, 2016 at 23:59 UTC*

Problem Scores: 7/7 5/6 5/5 1/1 2/2 3/3 2/2

Solved problems

No problem scores in this section

Additional theoretical material

No problem scores in this section

Problem Set 4 (39/40) 98%
Problem Set 4 *due Mar 02, 2016 at 23:59 UTC*

Problem Scores: 9/9 9/9 6/6 5/5 6/6 4/5

Unit summary

No problem scores in this section

Exam 1

Exam 1 (21/25) 84%
Exam 1 *due Mar 09, 2016 at 23:59 UTC*

Problem Scores: 4/4 4/5 1/2 3/3 2/2 2/4 5/5

Unit 5: Continuous random variables

Unit overview

No problem scores in this section

Lec. 8: Probability density functions (17/17) 100%
Exercises 8 *due Mar 18, 2016 at 23:59 UTC*

Problem Scores: 4/4 2/2 3/3 2/2 2/2 1/1 3/3

Lec. 9: Conditioning on an event; Multiple r.v.'s (26/26) 100%
Exercises 9 *due Mar 18, 2016 at 23:59 UTC*

Problem Scores: 1/1 3/3 2/2 1/1 2/2 8/8 1/1 5/5 3/3

Lec. 10: Conditioning on a random variable; Independence; Bayes' rule (25/28) 89%
Exercises 10 *due Mar 18, 2016 at 23:59 UTC*

Problem Scores: 2/2 2/2 5/8 1/1 3/3 2/2 3/3 4/4 1/1 1/1 1/1

Standard normal table

No problem scores in this section

Solved problems

No problem scores in this section

Problem Set 5 (32/32) 100%

Problem Set 5 *due Mar 18, 2016 at 23:59 UTC*

Problem Scores: 5/5 4/4 4/4 7/7 7/7 3/3 2/2

Unit summary

No problem scores in this section

Unit 6: Further topics on random variables

Unit overview

No problem scores in this section

Lec. 11: Derived distributions (17/18) 94%

Exercises 11 *due Mar 30, 2016 at 23:59 UTC*

Problem Scores: 2/2 2/2 1/2 6/6 4/4 2/2

Lec. 12: Sums of independent r.v.'s; Covariance and correlation (17/18) 94%

Exercises 12 *due Mar 30, 2016 at 23:59 UTC*

Problem Scores: 1/1 2/2 3/3 1/1 3/3 0/1 1/1 6/6

Lec. 13: Conditional expectation and variance revisited; Sum of a random number of independent r.v.'s (22/24) 92%

Exercises 13 *due Mar 30, 2016 at 23:59 UTC*

Problem Scores: 1/1 7/8 1/1 3/3 4/5 4/4 2/2

Solved problems

No problem scores in this section

Additional theoretical material

No problem scores in this section

Problem Set 6 (33/33) 100%

Problem Set 6 *due Mar 30, 2016 at 23:59 UTC*

Problem Scores: 6/6 3/3 3/3 6/6 5/5 6/6 4/4

Unit summary

No problem scores in this section

Unit 7: Bayesian inference

Unit overview

No problem scores in this section

Lec. 14: Introduction to Bayesian inference (23/23) 100%

Exercises 14 *due Apr 06, 2016 at 23:59 UTC*

Problem Scores: 4/4 3/3 5/5 2/2 4/4 3/3 2/2

Lec. 15: Linear models with normal noise (14/15) 93%

Exercises 15 *due Apr 06, 2016 at 23:59 UTC*

Problem Scores: 2/2 3/4 2/2 1/1 1/1 1/1 4/4

Problem Set 7a (22/23) 96%

Problem Set 7a *due Apr 06, 2016 at 23:59 UTC*

Problem Scores: 3/3 5/6 5/5 5/5 4/4

Lec. 16: Least mean squares (LMS) estimation (12/13) 92%
Exercises 16 *due Apr 13, 2016 at 23:59 UTC*

Problem Scores: 1/1 3/3 1/1 4/4 2/2 1/2

Lec. 17: Linear least mean squares (LLMS) estimation (12/13) 92%
Exercises 17 *due Apr 13, 2016 at 23:59 UTC*

Problem Scores: 2/2 2/2 2/2 1/2 1/1 3/3 1/1

Problem Set 7b (19/21) 90%
Problem Set 7b *due Apr 13, 2016 at 23:59 UTC*

Problem Scores: 3/3 3/3 3/3 3/3 4/4 3/5

Solved problems

No problem scores in this section

Additional theoretical material

No problem scores in this section

Unit summary

No problem scores in this section

Exam 2

Exam 2 (20/21) 95%
Exam 2 *due Apr 20, 2016 at 23:59 UTC*

Problem Scores: 3/3 3/3 4/4 2/3 4/4 4/4

Unit 8: Limit theorems and classical statistics

Unit overview

No problem scores in this section

Lec. 18: Inequalities, convergence, and the Weak Law of Large Numbers (11/13) 85%

Exercises 18 *due Apr 27, 2016 at 23:59 UTC*

Problem Scores: 1/1 1/1 2/2 2/2 4/4 1/3

Lec. 19: The Central Limit Theorem (CLT) (12/15) 80%

Exercises 19 *due Apr 27, 2016 at 23:59 UTC*

Problem Scores: 2/2 1/4 6/6 3/3

Lec. 20: An introduction to classical statistics (17/18) 94%

Exercises 20 *due Apr 27, 2016 at 23:59 UTC*

Problem Scores: 4/4 2/2 4/4 1/2 2/2 3/3 1/1

Solved problems

No problem scores in this section

Additional theoretical material

No problem scores in this section

Problem Set 8 (22/23) 96%

Problem Set 8 *due Apr 27, 2016 at 23:59 UTC*

Problem Scores: 6/6 3/3 5/5 3/3 2/2 3/4

Unit summary

No problem scores in this section

Unit 9: Bernoulli and Poisson processes

Unit overview

No problem scores in this section

Lec. 21: The Bernoulli process (11/13) 85%

Exercises 21 *due May 11, 2016 at 23:59 UTC*

Problem Scores: 3/4 1/1 3/3 1/1 1/1 1/2 1/1

Lec. 22: The Poisson process (9/13) 69%

Exercises 22 *due May 11, 2016 at 23:59 UTC*

Problem Scores: 1/1 1/3 1/1 4/4 1/1 0/2 1/1

Lec. 23: More on the Poisson process (12/13) 92%

Exercises 23 *due May 11, 2016 at 23:59 UTC*

Problem Scores: 0/1 2/2 2/2 1/1 1/1 1/1 1/1 1/1 2/2 1/1

Solved problems

No problem scores in this section

Additional theoretical material

No problem scores in this section

Problem Set 9 (32/36) 89%

Problem Set 9 *due May 11, 2016 at 23:59 UTC*

Problem Scores: 5/6 4/5 5/5 7/7 8/8 0/2 3/3

Unit summary

No problem scores in this section

Unit 10: Markov chains

Unit overview

No problem scores in this section

Lec. 24: Finite-state Markov chains (18/19) 95%

Exercises 24 *due May 18, 2016 at 23:59 UTC*

Problem Scores: 2/2 2/3 3/3 2/2 5/5 4/4

Lec. 25: Steady-state behavior of Markov chains (18/20) 90%

Exercises 25 *due May 18, 2016 at 23:59 UTC*

Problem Scores: 3/3 4/4 1/2 4/4 2/2 4/5

Lec. 26: Absorption probabilities and expected time to absorption (14/17) 82%

Exercises 26 *due May 18, 2016 at 23:59 UTC*

Problem Scores: 0/3 2/2 2/2 2/2 3/3 5/5

Solved problems

No problem scores in this section

Problem Set 10 (32/35) 91%

Problem Set 10 *due May 18, 2016 at 23:59 UTC*

Problem Scores: 4/6 6/6 6/7 10/10 6/6

Exit Survey

Important Exit Survey

No problem scores in this section

Final Exam

Final Exam (21/21) 100%

Final Exam *due May 24, 2016 at 23:59 UTC*

Problem Scores: 3/3 2/2 2/2 3/3 6/6 5/5