**Math 110/110S Pace Chart**

Math 110/110S is a 6-unit course combination, with 8 hours of in-class contact. This pace chart assumes 31 class meetings @ 125-minutes per class. Each day’s plans account for up to 200 minutes of instruction so that you will have time for several breaks. Out of 16 weeks of instruction, the pace chart includes time for the final exam and final project presentations; in addition, one day is set aside for a holiday. The holiday is arbitrarily placed into Week 14.

Notes:

1. This pace chart lays out a plan to achieve all Math 110 and Math 110S learning goals and addresses all required content topics.
2. If homework says “Mod 5”, this means all pages associated with Module 5 in Canvas, including the Module Checkpoint (Ckpt) quiz.
3. Extensive StatCrunch instructions with pictures are embedded in Canvas when needed for an exercise.
4. See the instructors’ manual for extensive facilitation notes for these activities.

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| Week | Day 1 Activities | Day 2 Activities |
| 1  1st Poster Session,  Activities to set norms and clarify expectations  Start Unit 2  Distributions Quantitative  Data | Welcome, introduce yourself (15 mins)  Ice breakers (35 mins)  Mod 1 Cereal Activity (125 mins)  Setting Group Norms (25 mins)  Canvas homework preview (5 mins) –1st HW includes a discussion post. Pull up that assignment in Canvas, discuss general directions.  HW:  Read the syllabus,  complete Mods 1-3 in Canvas, purchase a StatCrunch license and set up StatCrunch account | Syllabus quiz (15 mins)  4.1 (75 mins)  4.2 (90 mins)  High Quality Feedback (15 mins)  Canvas HW preview (5 mins)  HW:  Feedback on DB\* Mod 2 (2 of 4 discussion 1),  Part of Mod 4 – beginning through Dotplots (2c of 2 quiz 5),  \* DB=discussion board |
| 2  Unit 2 | 4.3 (100 mins)  4.4 Lab (60 mins)  How Learning Happens (15)  HW preview (15 mins)– Canvas Histogram Lab requires StatCrunch (demo making a histogram to reassure students; Canvas has instructions)  HW:  Finish Mod 4 (including Ckpt),  Feedback on DB Mod 4–Dotplots (2b of 2 discussion 1)  4.4 Lab (if not finished in class) | 5.1 (90 mins)  5.2 (70 mins)  Mod 2 Activity in packet (30 mins)  HW preview: Students will do all of Mod 5, even though we have not completed the Mod 5 activities in class.  HW:  Mod 5 (including Ckpt),  Feedback on DB Mod 4-Histogram Lab (discussion 2) AND Histograms (4 of 4 discussion 3),  Read Brainology in Mod 1 of packet |
| 3  Unit 2 | 5.3 (70 mins)  6.1 (70 mins)  Discuss Brainology (50 mins)  HW:  Feedback on DB Mod 5-Reflections on Success (discussion 1),  Mod 6 all,  Read “You Can Grow Your Brain” | 6.2 (80 mins)  7.1 (100 mins)  Discuss “You Can Grow Your Brain” (25 mins)  HW:  Feedback on DB Mod 6 (2c of 3 discussion 1)  6.3 Lab |
| 4  Finish Unit 2  Unit 3  Linear Regression | 7.2 (65 mins)  7.3 (60 mins)  7.4 (60 mins)  7.5 Mod 7 Lab (Get a start: 15 mins)  HW:  Mod 7 all,  7.5 Lab | 7.7 Unit 2 Project (70 mins)  Group quiz Unit 2 (40 mins) – Use 7.6 Unit 6 Summary Lab as a quiz  8.1 (80 mins)  HW:  Feedback on DB Mod 7-Drinking Habits Lab (discussion 1),  Mod 8 Part 1 through Scatterplots (4 of 4) |
| 5  Finish Unit 3  Unit 4  Relationships  Categorical  Variables | 8.2 (80 mins)  8.3 (35 mins)  8.4 (70 mins)  HW:  Mod 8 finish (including Ckpt) | 9.1 (65 mins)  9.2 (50 mins)  Assessing the Fit of a Line (15 mins)  9.4 Unit 3 Group Project (70 mins)  HW:  Mod 9 all,  Checkpoint Unit 3,  9.3 Unit 3 Lab |
| 6  Exam 1  Units 2-4  Start Unit 5  Probability and Probability  Distributions | 10.1 (50 mins)  10.2 (50 mins)  10.4 Unit 4 Project (60 mins)  10.3 Unit 4 Lab (40)  HW:  Mod 10 all,  Unit 4 Checkpoint, | Group quiz Units 2-4 (60 mins)  Interactive exam prep (80 mins)–Teach a Problem or something similar  Discuss blog “This is Why You Should Be Proud of Making Mistakes” (30 mins)  HW:  Feedback on DB Mod 10 Treating Depression Lab (discussion 1&2),  Study for Exam |
| 7  Finish  Unit 5  Start Unit 6  Statistical  Studies | EXAM (120 mins)  Collect student exams.  Turn the exam into a learning opportunity by doing parts of the exam interactively. (80 mins)  To prevent exam work from leaving the class, distribute colored scratch paper. Students turn in their scratch paper before leaving.  Project one problem at a time. Think-Square-Share, with student presentations. | 11.1 (30 mins)  11.2 (50 mins)  12.1 (60 mins)  12.2 (60 mins)  HW:  Mod 11 all,  Mod 12 through Mod 12-Intro to Normal Probability Distributions (2c of 5 quiz 6) |
| 8  Finish Unit 6  Start  Unit 7  Linking  Probability  to  Statistical  Inference | 12.3 (45 mins)  12.4 Lab (40 mins)  Mod 13 (45 mins)  14.1 (35 mins)  14.2 SKIP  15.1 (35 mins)  HW:  Feedback on DB Mod 11 Probability Applets Lab (discussion 1),  Finish Mod 12,  Unit 5 Checkpoint,  Mod 13 all (short),  Mod 14 all (short) | 15.3 Unit 6 Group Project (100 mins)  15.2 Unit 6 Lab (40 mins)  Mod 16 Activity (10 mins)  17.1 (50 mins)  HW:  Feedback DB Mod 13 (1a of 4 discussion 1),  Mod 15 all,  Unit 6 Checkpoint,  Mod 16 all, |
| 9  Unit 7 | Discuss Canvas Intro to Inference (2 of 2) (20 mins)  17.2 (55 mins)  17.3 (60 mins)  17.4 (60 mins)  HW:  15.2 Lab Feedback DB Mod 15 (1 of 2 discussion 1) & (2 of 2 discussion 2),  Mod 17 all | Group quiz Mod 17 (40 mins)  18.1 (50 mins)  18.2 (45 mins)  18.3 (50 mins)  HW:  Feedback DB Mod 17 (3 of 6 discussion 1), (5 of 6 discussion 2), (6 of 6 discussion 3),  Mod 18 through Intro to Statistical Inference (2b of 3 quiz 4) |
| 10  Finish  Unit 7  Start Unit 8  Proportions | 18.4 (55 mins)  18.5 Lab (45 mins, challenging!)  Group quiz Mod 18 (20)  19.1 (80 mins)  HW:  Feedback DB Mod 18 (2b of 3 discussion 1),  Finish Mod 18,  Unit 7 Checkpoint,  Mod 19 all,  Finish 18.5 Lab | 20.1 (80 mins)  20.2 (15 mins)  20.3 (80 mins)–includes extra practice  on interpreting P-value. See suggestions in facilitation notes.  HW:  Feedback DB Mod 19 (2 of 3 discussion 1),  Mod 20 all |
| 11  Finish  Unit 8  Proportions | 21.1 (80 mins)  21.2 (60 mins)  21.3 Lab (50 mins)  HW:  Feedback DB Mod 20 (4a of 5 discussion 1),  Mod 21 all,  Unit 8 Checkpoint | 21.4 Unit 8 Project (70 mins)  Group Quiz Units 5-8 (60 min)  Exam prep: speed-dating, Teach a Problem (60 mins)  HW:  Feedback Mod 21 Cell Phone Lab (discussion 1),  Study for exam |
| 12  Exam 2  Units 5-8  Start Unit 9  Means | EXAM Units 5-8 (120 min)  Collect student exams.  Turn the exam into a learning opportunity by doing parts of the exam interactively. (80 mins)  To prevent exam work from leaving the class, distribute colored scratch paper. Students turn in their scratch paper before leaving.  Project one problem at a time. Think-Square-Share, with student presentations. | 22.1 (70 mins)  22.2 (60 mins)  Start work on final project (70 min)  Consider randomly assign groups so that no one is left out.  Groups pick a topic, write a research question (review components of a good research question–Mod 13) and design their study (similar to Unit 6 Project)  HW:  Mod 22 all |
| 13  Unit 9 Means | 23.1 (65 mins)  23.2 (65 mins)  Continue work on final projects (70 mins): refine study design, clarify variables and variable type. Make plans for collecting data. Poster & gallery walk?  HW:  Mod 23 all,  Start data collection for final project | 24.1 (60 mins)  24.2 (55 mins)  25.1 (90 mins)  HW:  Mod 24 all  Continue data collection for final project. |
| 14  Finish  Unit 9 Means  Unit 10 ANOVA | 25.3 Unit 9 Project (70 mins)  25.2 Lab (challenging!) (65 mins)  Final project work (50 mins): do a dry run with fictitious data in StatCrunch. Make a spreadsheet, create graphs and find numerical summaries, conduct statistical tests.  HW:  Feedback DB Mod 24 (4c of 5 discussion 1), (4d of 5 discussion 2), (5a of 5 discussion 3),  Mod 25 all,  Checkpoint Unit 9,  Finish data collection for final project | Mod 26 (110 mins)  Work on final projects (90 mins): Enter and analyze the real data in StatCrunch. Write drafts of each section of the report.  HW:  Feedback DB Mod 25 (discussion 1),  Mod 26 all,  Unit 10 Checkpoint |
| 15  Unit 11  Chi-square | Mod 27.1 (100 mins)  SKIP 27.2 and 27.3  Group Quiz Units 9-11 (50 mins)  Finalize project reports and do dry run of project presentation (50 mins)  HW:  Feedback DB Mod 26 (6 of 7 discussion 1),  Mod 27 all,  Unit 11 Checkpoint,  Finish projects | PLACEHOLDER FOR HOLIDAY |
| 16  Final Exam  and Final Project | Project presentations (120 mins)  Group quiz–comprehensive or Teach A Problem (80 mins)  HW: Study for Final Exam | FINAL EXAM |