

Summer 2021

Topics will be released on Monday of each week at 12:00 UTC (military time).

Our goal will be to release each Topic and its associated Notebook (if any) approximately two weeks before the Notebook's due date. (For instance, if Notebook 5 is due on Mon Jun 14, then we will release Topic 5 and Notebook 5 on or before Mon May 21.)

The value of each Notebook and Exam, as a percentage of your final grade, is shown in parentheses.

Ministers and holidays

- * 13 May 17 (First day of class)
- * 14 May 21 (Memorial Day)
- * 16 Jun 21 (Eid-al-Fitr holiday)
- * 16 Jun 21 (US Independence Day)
- * 16 Jul 27 (Last day of class)
- * 19 Aug 2 (Last day of summer)

Week	Dates	Topic(s)	Assignment(s) due - This due time is always 11:59 UTC unless otherwise specified.	2021 Due Date	Time Since Converter Link for Due Date Time	Update/Notes
0	Mon May 17 - Sun May 23	Topic 0: Onboarding exam + intro Topic 1: Python intro/quiz	Assignment 0 (20%) Final Notebook 1 (10%) released on Mon May 24 (Deadline deadline, no penalty, Wed May 26) Late deadline: 0% credit (Fri Jun 4) Notebook 2 (4%) officially due Mon May 24 (Deadline deadline, no penalty, Wed Jun 2) Late deadline: 0% credit (Fri Jun 4) (Topic 2 is "halfway" there as no Notebook 3)	20210524	https://www.timeconverter.com/	
1	Mon May 24 - Sun May 30	Topic 2: Matrix association rules	Notebook 3 (4%) officially due Mon May 24 (Deadline deadline, no penalty, Wed Jun 2) Late deadline: 0% credit (Fri Jun 4) (Topic 2 is "halfway" there as no Notebook 3)	20210531	https://www.timeconverter.com/	
2	Mon May 31 - Sun Jun 6	Topics 3-4: Math review + Reading part	Notebook 4 (4%) officially due Mon May 31 (Deadline deadline, no penalty, Wed Jun 9) Late deadline: 0% credit (Fri Jun 11)	20210607	https://www.timeconverter.com/	
3	Mon Jun 7 - Sun Jun 13	Topic 5: Programming unstructured data (Topic 6 is "OPTIONAL" - nothing to submit)	Notebook 5 (4%) officially due Mon Jun 7 (Deadline deadline, no penalty, Wed Jun 16) Late deadline: 0% credit (Fri Jun 18)	20210614	https://www.timeconverter.com/	
4	Mon Jun 14 - Sun Jun 20	Ministers 1: Topics 6-8	Notebook 6 (4%) released on Thu Jun 17 at 12:00 UTC, due by Mon Jun 21 (Deadline deadline, no penalty, Wed Jun 23) Late deadline: 0% credit (Fri Jun 25)	20210621	https://www.timeconverter.com/	
5	Mon Jun 21 - Sun Jun 27	Topic 7: 8. Relational data in pandas + SQL (Topic 8 is "OPTIONAL" - nothing to submit)	Notebook 7 (4%) officially due Mon Jun 21 (Deadline deadline, no penalty, Wed Jun 23) Late deadline: 0% credit (Fri Jun 25) Notebook 8 (4%) officially due Mon Jun 21 (Deadline deadline, no penalty, Wed Jun 23) Late deadline: 0% credit (Fri Jun 25)	20210628	https://www.timeconverter.com/	
6	Mon Jun 28 - Sun Jul 4	Topic 10: Array processing using NumPy Topic 11: Reading + Matrix context	Notebook 10 (4%) officially due Mon Jun 28 (Deadline deadline, no penalty, Wed Jul 7) Late deadline: 0% credit (Fri Jul 9) Notebook 11 (4%) officially due Mon Jun 28 (Deadline deadline, no penalty, Wed Jul 7) Late deadline: 0% credit (Fri Jul 9)	20210705	https://www.timeconverter.com/	
7	Mon Jul 5 - Sun Jul 11	Ministers 2: Topics 7, 8-11	Notebook 11 (4%) released on Thu Jun 24 at 12:00 UTC, due by Mon Jul 12 at 11:59 UTC (Deadline deadline, no penalty, Wed Jul 14) Late deadline: 0% credit (Fri Jul 16)	20210712	https://www.timeconverter.com/	
8	Mon Jul 12 - Sun Jul 18	Topic 12: Linear regression Topic 13: Logistic regression classification	Notebook 12 (4%) officially due Mon Jul 12 (Deadline deadline, no penalty, Wed Jul 14) Late deadline: 0% credit (Fri Jul 16)	20210719	https://www.timeconverter.com/	
9	Mon Jul 19 - Sun Jul 25	Topic 14: Clustering Topic 15: Complement via dimension	Notebook 14 (4%) officially due Mon Jul 19 (Deadline deadline, no penalty, Wed Jul 21) Late deadline: 0% credit (Fri Jul 23) Notebook 15 (4%) officially due Mon Jul 19 (Deadline deadline, no penalty, Wed Jul 21) Late deadline: 0% credit (Fri Jul 23)	20210726	https://www.timeconverter.com/	
10	Mon Jul 26 - Thu Aug 5	Final Exam	Final exam (25%) released on Thu Jul 29 at 12:00 UTC, due by Thu Aug 5 at 11:59 UTC	20210805	https://www.timeconverter.com/	

Spring 2021

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Our goal will be to release each Topic and its associated Notebook (if any) approximately two weeks before the Notebook's due date. (For instance, if Notebook 5 is due on Mon Feb 22, then we will release Topic 5 and Notebook 5 on or before Mon Feb 8.)

The value of each Notebook and Exam, as a percentage of your final grade, is shown in parentheses.

Week	Dates	Topic(s)	Assignment(s) due - The due time is always 11:59 UTC unless otherwise specified.	2020 Due Date	Time Zone Converter Link to Due Date/Time	Updatelinkrate
0	Thu Jan 14 - Sun Jan 17	Topic 0: Onboarding exam + intro				
0.5	Mon Jan 18 - Sun Jan 24	Topic 1: Python ramp-up	Notebook 0 (4%) officially due Mon Feb-1 (Extended deadline, no penalty, Wed Feb-3) (See deadline, 50% credit) Fri Feb-26)	20210201	Link	Link
1	Mon Jan 25 - Sun Jan 31	Topic 2: Mining association rules	Notebook 1 (4%) due Mon Feb-1 (Extended deadline, no penalty, Wed Feb-3) (See deadline, 50% credit) Fri Feb-26)	20210201	Link	Link
2	Mon Feb 1 - Sun Feb 7	Topic 3-4: Math review + floating-point	Notebook 2 (4%) due Mon Feb-8 (Extended deadline, no penalty, Wed Feb-10) (See deadline, 50% credit) Fri Feb-26)	20210208	Link	Link
3	Mon Feb 8 - Sun Feb 14	Topic 5-6: Preprocessing unstructured data + web mining	Notebook 3 (4%) due Mon Feb-15 (Extended deadline, no penalty, Wed Feb-17) (See deadline, 50% credit) Fri Feb-26)	20210215	Link	Link
4	Mon Feb 15 - Sun Feb 21	Topic 7-8: Tidyng data (parties) + basic visualizations	Notebook 4 (4%) due Mon Feb-22 (Extended deadline, no penalty, Wed Feb-24) (See deadline, 50% credit) Fri Feb-26)	20210222	Link	Link
5	Mon Feb 22 - Sun Feb 28	Midterm 1: Topics 5-8	Midterm 1 (10%) released on Fri Feb-26 at 12:00 UTC, due by Mon Mar-8 at 11:59 UTC	20210308	Link	Link
6	Mon Mar 1 - Sun Mar 7	Topic 9: Relational data + SQL	Notebook 7 (4%) due Mon Mar-8 (Extended deadline, no penalty, Wed Mar-10) (See deadline, 50% credit) Fri Apr-2)	20210308	Link	Link
7	Mon Mar 8 - Sun Mar 14	Topic 10: Array processing using NumPy + SciPy	Notebook 8 (4%) due Mon Mar-15 (Extended deadline, no penalty, Wed Mar-17) (See deadline, 50% credit) Fri Apr-2)	20210315	Link	Link
8	Mon Mar 15 - Sun Mar 21	Topic 11: Ranking + Markov chains	Notebook 10 (4%) due Mon Mar-22 (Extended deadline, no penalty, Wed Mar-24) (See deadline, 50% credit) Fri Apr-2)	20210322	Link	Link
9	Mon Mar 22 - Sun Mar 28	Topic 12: Linear regression	Notebook 11 (4%) due Mon Mar-29 (Extended deadline, no penalty, Wed Mar-31) (See deadline, 50% credit) Fri Apr-2)	20210329	Link	Link
10	Mon Mar 29 - Sun Apr 4	Midterm 2: Topics 7, 9-11	Midterm 2 (10%) released on Fri Apr-2 at 12:00 UTC, due by Mon Apr-12 at 11:59 UTC	20210412	Link	Link
11	Mon Apr 5 - Sun Apr 11	Topic 13-14: Classification and clustering	Notebook 12 (4%) due Mon Apr-12 (Extended deadline, no penalty, Wed Apr-14) (See deadline, 50% credit) Fri Apr-30)	20210412	Link	Link
12	Mon Apr 12 - Sun Apr 18	Topic 15: Compression via dimension reduction	Notebook 13-14 (4+4=8%) due Mon Apr-19 (Extended deadline, no penalty, Wed Apr-21) (See deadline, 50% credit) Fri Apr-30)	20210419	Link	Link
13	Mon Apr 19 - Sun Apr 25	Final exam study period	Notebook 15 (4%) due Mon Apr-26 (Extended deadline, no penalty, Wed Apr-28) (See deadline, 50% credit) Fri Apr-30)	20210426	Link	Link
14-15	Mon Apr 26 - Thu May 6	Final Exam	Final exam, release on Fri Apr-30 at 12:00 UTC, due by Thu May-6 at 11:59 UTC	20210506	Link	Link

Fall 2020

Topics will be released on Monday of each week at 12:00 UTC (Military time).

Our goal will be to release each Topic and its associated Notebook (if any) approximately two weeks before the Notebook's due date. (For instance, if Notebook 5 is due on Mon Sep-21, then we will release Topic 5 and Notebook 5 on or before Mon Sep-7.)

The value of each Notebook and Exam, as a percentage of your final grade, is shown in parentheses.

Week	Date	Topic(s)	Assignment(s) due - The due time is always 11:59 UTC unless otherwise specified.	ISC Due Date	Time Zone Converter Link to Due Date/Time	Grade/estimate
0	Aug-17	Aug-23 Topic 0-1: Intro + Python review	Notebook 0 (2%), officially due Mon Aug-24 (Extended deadline, no penalty: Wed Aug-26) (Late deadline, 50% credit): Wed Sep-23	20200824	Link	
1	Aug-24	Aug-30 Topic 2: Mining association rules	Notebook 1 (4%), due Mon Aug-31 (Extended deadline, no penalty: Wed Sep-23) (Late deadline, 50% credit): Wed Sep-23	20200831	Link	
2	Aug-31	Sep-6 Topic 3-4: Math review + Reading-point	Notebook 2 (4%), due Mon Sep-7 (Extended deadline, no penalty: Wed Sep-9) (Late deadline, 50% credit): Wed Sep-23	20200907	Link	
3	Sep-7	Sep-13 Topic 5-6: Preprocessing unstructured data + web mining	Notebook 3 (4%), due Mon Sep-14 (Extended deadline, no penalty: Wed Sep-16) (Late deadline, 50% credit): Wed Sep-23 (Notebook 3 is completed)	20200914	Link	
4	Sep-14	Sep-20 Topic 7-8: Tidyng data (part 1) + basic visualization	Notebook 4 (4%), due Mon Sep-21 (Extended deadline, no penalty: Wed Sep-23) (NO LATE SUBMISSIONS)	20200921	Link	
5	Sep-21	Sep-27 Midterm 1: Topics 0-6	Midterm 1 (10%), release on Fri Sep-25 at 12:00 UTC, due by Mon Oct-5 at 11:59 UTC	20201005	Link	
6	Sep-28	Oct-4 Topic 9: Relational data + SQL	Notebook 5 (4%), due Mon Oct-5 (Extended deadline, no penalty: Wed Oct-7) (Late deadline, 50% credit): Fri Oct-30 (Notebook 5 is completed)	20201005	Link	
7	Oct-6	Oct-11 Topic 10: Array processing using NumPy + SciPy	Notebook 6 (4%), due Mon Oct-12 (Extended deadline, no penalty: Wed Oct-14) (Late deadline, 50% credit): Fri Oct-30	20201012	Link	
8	Oct-12	Oct-18 Topic 11: Ranking + Markov chains	Notebook 7 (4%), due Mon Oct-19 (Extended deadline, no penalty: Wed Oct-21) (Late deadline, 50% credit): Fri Oct-30	20201019	Link	
9	Oct-19	Oct-25 Topic 12: Linear regression	Notebook 8 (4%), due Mon Oct-26 (Extended deadline, no penalty: Wed Oct-28) (Late deadline, 50% credit): Fri Oct-30 (Withdraw deadline is Sat Oct-24)	20201026	Link	
10	Oct-26	Nov-1 Midterm 2: Topics 7-8-11	Midterm 2 (10%), release on Fri Oct-30 at 12:00 UTC, due by Mon Nov-9 at 11:59 UTC	20201109	Link	
11	Nov-2	Nov-8 Topic 13-14: Classification and clustering	Notebook 9 (4%), due Mon Nov-9 (Extended deadline, no penalty: Wed Nov-11) (Late deadline, 50% credit): Fri Nov-27	20201109	Link	
12	Nov-9	Nov-15 Topic 15: Compression via dimension reduction	Notebook 10 (4%), due Mon Nov-16 (Extended deadline, no penalty: Wed Nov-18) (Late deadline, 50% credit): Fri Nov-27	20201116	Link	
13	Nov-16	Nov-22 Final exam study period	Notebook 11 (4%), due Mon Nov-23 (Extended deadline, no penalty: Wed Nov-25) (Late deadline, 50% credit): Fri Nov-27	20201123	Link	
14	Nov-23	Nov-29 Final Exam	Final exam: release on Thu Nov-26 at 12:00 UTC, due by Mon Dec-7 at 11:59 UTC	20201207	Link	

Spring 2020

Topics will be released on Monday of each week at 12:00 UTC (midnight GMT).

Our goal will be to release each Topic and its associated Notebook (if any) approximately two weeks before the Notebook's due date. (For instance, if Notebook 5 is due on Mon Feb 10, then we will release Topic 5 and Notebook 5 on or before Mon Jan 27.)

The value of each Notebook and Exam, as a percentage of your final grade, is shown in parentheses.

Week	Date	Topics	Assignments due — The due time is always 11:59 UTC unless otherwise specified.	ISO Due Date	Time Zone Converter Link for Due Date/Time	Updates/notes
0	Jan-6	Topic 0: Intro + Python review	Notebook 0 (2hr) due Mon Jan 6	20200106	UTC: 20200106	
1	Jan-13	Jan-13 Topic 1: Missing association rules	Notebook 1 (4hr) due Mon Jan 20	20200120	UTC: 20200120	
2	Jan-20	Jan-20 Topic 2: Math review + floating-point	Notebook 2 (4hr) due Mon Jan 27	20200127	UTC: 20200127	
3	Jan-27	Topic 3: Processing unstructured data + Topic 4: File I/O	Notebook 3 (4hr) due Mon Feb 3 (Notebook 3 is optional, or 5% of your final grade)	20200203	UTC: 20200203	
4	Feb-3	Topic 5: Text processing + basic	Notebook 4 (4hr) due Mon Feb 10 (Notebook 4 is optional, or 5% of your final grade)	20200210	UTC: 20200210	
5	Feb-10	Feb-10 Midterm 1: Topics 0-4	Midterm 1 (15%) release on Thu Feb 13 at 12:00 UTC, due by Thu Feb 20 at 11:59 UTC	20200220	UTC: 20200220	
6	Feb-17	Feb-17 Topic 6: Resistor data + PCA	Notebook 5 (4hr) due Mon Feb 24 (Notebook 5 is optional, or 5% of your final grade)	20200224	UTC: 20200224	107 min effectively due Feb 20, with late penalties until Feb 29
7	Feb-24	Topic 7: Array processing using NumPy + Mar 1: Intro	Notebook 6 (4hr) due Mon Mar 2	20200302	UTC: 20200302	100 min effectively due Mar 4, with late penalties until Mar 7
8	Mar-2	Mar-2 Topic 8: Ranking + Markov chains	Notebook 7 (4hr) due Mon Mar 9	20200309	UTC: 20200309	
9	Mar-9	Mar-9 Topic 9: Linear regression	Notebook 8 (4hr) due Mon Mar 16. Note: Withdraw deadline is Wed Mar 11	20200316	UTC: 20200316	
10	Mar-16	Mar-16 Spring break	Midterm 2 (15%) release on Thu Mar 20 at 12:00 UTC, due by Thu Apr 2 at 11:59 UTC	20200402	UTC: 20200402	
11	Mar-23	Mar-23 Midterm 2: Topics 5-9	Notebook 9 (4hr) due Mon Apr 6	20200406	UTC: 20200406	
12	Mar-30	Apr-9 Topic 10: Classification and clustering	Notebook 10 (4hr) due Mon Apr 13 (Notebook 10 is optional, or 5% of your final grade)	20200413	UTC: 20200413	
13	Apr-6	Apr-6 Topic 11: Compression via dimension reduction	Notebook 11 (4hr) due Mon Apr 20	20200420	UTC: 20200420	
14	Apr-13	Apr-13 (OPTIONAL) Topic 12: Putting it all together	Notebook 12 (4hr) due Mon Apr 27	20200427	UTC: 20200427	
15	Apr-20	Apr-20 Final Exam	Final exam release on Thu Apr 23 at 12:00 UTC, due by Thu Apr 30 at 11:59 UTC	20200430	UTC: 20200430	

Fall 2019

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Week	Dates		Topic(s)	Assignment(s) due -- The due time is always 11:59 UTC unless otherwise specified.
0	Aug-19	Aug-25	Topics 0+1: Intro + Python review	Notebook 0: due Mon Aug-26
1	Aug-26	Sep-1	Topic 2: Mining association rules	Notebook 1: due Mon Sep-2
2	Sep-2	Sep-8	Topics 3+4: Math review + floating-point	Notebook 2: due Mon Sep-9
3	Sep-9	Sep-15	Topics 5+6: Preprocessing unstructured data + web mining	Notebook 4: due Mon Sep-16 (Notebook 3 is ungraded)
4	Sep-16	Sep-22	Topics 7+8: Tidying data (pandas) + basic visualizations	Notebook 5: due Mon Sep-23 (Notebook 6 is ungraded)
5	Sep-23	Sep-29	Midterm 1: Topics 0-5	Midterm 1: release on Thu Sep-26 at 12:00 UTC, due by Thu Oct-3 at 11:59 UTC
6	Sep-30	Oct-6	Topic 9: Relational data + SQL	Notebook 7+8: due Mon Oct-7
7	Oct-7	Oct-13	Topic 10: Array processing using Numpy + Scipy	Notebook 9: due Mon Oct-14
8	Oct-14	Oct-20	Topic 11: Ranking + Markov chains	Notebook 10: due Mon Oct-21
9	Oct-21	Oct-27	Topic 12: Linear regression	Notebook 11: due Mon Oct-28
10	Oct-28	Nov-3	Midterm 2: Topics 7-11	Midterm 2: release on Thu Oct-31 at 12:00 UTC, due by Thu Nov-7 at 11:59 UTC
11	Nov-4	Nov-10	Topic 13: Classification	Notebook 12: due Mon Nov-11
12	Nov-11	Nov-17	Topic 14: Clustering	Notebook 13: due Mon Nov-18
13	Nov-18	Nov-24	Topic 15: Compression via dimension reduction	Notebook 14: due Mon Nov-25
14	Nov-25	Dec-1	(OPTIONAL) Topic 16: Putting it all together (TBD)	Notebook 15: due Mon Dec-2
15	Dec-2	Dec-8	Final Exam	Final exam: release on Thu Dec-5 at 12:00 UTC, due by Thu Dec-12 at 11:59 UTC