

(<https://www.nd.edu/>)

## Notre Dame CSE 40647/60647 Fall 2017 - Data Science (Updating)

- ▶ **Instructor:** Dr. Meng Jiang ([index.html](#))
- ▶ **Time:** 02:00 pm - 03:15 pm, Tuesday Thursday, August 22 to December 7, 2017
- ▶ **Location:** DeBartolo Hall 140
- ▶ **TAs:** Qi Li [[qli8@nd.edu](mailto:qli8@nd.edu) ([qli8@nd.edu](mailto:qli8@nd.edu))]
- ▶ **Office hours:** 03:30 pm - 04:30 pm @ 326C Cushing Hall
- ▶ **Syllabus:** Download ([teaching/Syllabus-CSE-DataScience-Fall17.pdf](#))
- ▶ **Piazza:** <https://piazza.com/class/j6dmfs52c6d5ov> (<https://piazza.com/class/j6dmfs52c6d5ov>)

Week#	Date (T/R)	Lecture#	Topic
1	08-22-17 (T)	1	Introduction [ <a href="#">pdf (teaching/CSEx0647Fall17-01-Introduction.pdf)</a> ]
1	08-24-17 (R)	2	Data Processing: Data description
2	08-29-17 (T)	3	Data Processing: Data visualization   <b>HW1 out</b>
2	08-31-17 (R)	4	<b>Project introduction, Project out</b>
3	09-05-17 (T)	5	Data processing: Data cleaning and data integration
3	09-07-17 (R)	6	Data processing: Data reduction and dimension reduction
4	09-12-17 (T)	7	Data cube: Concepts and operations   <b>HW1 due, HW2 out</b>
4	09-14-17 (R)	8	Data cube: Data warehouse and OLAP
5	09-19-17 (T)	9	Frequent pattern mining: Apriori
5	09-21-17 (R)	10	Frequent pattern mining: FP-Growth   <b>HW2 due, HW3 out</b>
6	09-26-17 (T)	11	Frequent pattern mining: Evaluation
6	09-28-17 (R)	12	Frequent pattern mining: Beyond itemset
7	10-03-17 (T)	13	<b>Course review 1, HW3 due</b>
7	10-05-17 (R)	-	<b>Mid-term exam</b>
8	10-10-17 (T)	14	Classification: Decision tree induction
8	10-12-17 (R)	15	Classification: Naive Bayes   <b>HW4 out</b>
9	10-17-17 (T)	-	Fall break
9	10-19-17 (R)	-	Fall break
10	10-24-17 (T)	16	Classification: Evaluation
10	10-26-17 (R)	17	Classification: Ensembles
11	10-31-17 (T)	18	Classification: SVMs
11	11-02-17 (R)	19	Classification: Neural networks
12	11-07-17 (T)	20	Clustering: Concepts
12	11-09-17 (R)	21	Clustering: Partitioning methods   <b>HW4 due, HW5 out</b>
13	11-14-17 (T)	22	Clustering: Kernel-based clustering

Week#	Date (T/R)	Lecture#	Topic
13	11-16-17 (R)	23	Clustering: Density-based clustering
14	11-21-17 (T)	24	Clustering: Evaluation
14	11-23-17 (R)	-	Thanksgiving break
15	11-28-17 (T)	25	<b>Course review 2, HW5 due</b>
15	11-30-17 (R)	26	<b>Course review 3, Project due</b>
16	12-05-17 (T)	27	<b>Project presentation 1</b>
16	12-07-17 (R)	28	<b>Project presentation 2</b>
17	12-12-17 (T)	-	<b>Final exam</b>