

CDS 292: Network Analysis

Spring 2021

Syllabus Part 3

Syllabus is split into three parts:

- **Part 1: General Course Description**
- **Part 2: Instructors**
- **Part 3: Calendar**

Calendar

Definition of a week: In Spring 2021, each week is defined from the beginning of Saturday (12:00 AM) to the end of the following Friday (11:59 PM)

**** SCHEDULE IS SUBJECT TO CHANGE AT THE INSTRUCTOR'S DISCRETION****

Week 1 (Saturday 23th, January to Friday 29th, January)

Lesson 0: Navigating CDS 292 Online and Lesson 1: python book bootcamp and Colaboratory

Assignments due:

- **Wednesday January 27th by 11:59 PM:**

- 1) FERPA form for Colaboratory Use
- 2) Signed Statement that Lesson 0 has been read and understood
- 3) Colaboratory notebook assignment 1

- **Friday January 29th by 11:59PM:**

- 1) Problem Set 1

Week 2 (Saturday 30th, January to Friday 5th, February)

Lesson 2: Building Blocks of Networks

Assignments due:

- **Wednesday February 3rd by 11:59 PM:**

- 1) Colaboratory notebook assignment 2

- **Friday February 5th by 11:59PM:**

- 1) Problem Set 2

Week 3 (Saturday 6th, February to Friday 12th, February)

Lesson 3 (part 1): Node Degrees, Link Indicators, Network Formulas, and Adjacency Matrix

Assignments due:

- **Wednesday February 10th by 11:59 PM:**

- 1) Colaboratory notebook assignment 3.1

- **Friday February 12th by 11:59PM:**

- 1) Problem Set 3.1

Week 4 (Saturday 13th, February to Friday 19th, February)

Lesson 3 (part 2): Node Degrees, Link Indicators, Network Formulas, and Adjacency Matrix

Assignments due:

- **Wednesday February 17th by 11:59 PM:**
 - 1) Colaboratory notebook assignment 3.2
- **Friday February 19th by 11:59PM:**
 - 1) Problem Set 3.2

Week 5 (Saturday 20th, February to Friday 26th, February)

Lesson 3 (part 3): Node Degrees, Link Indicators, Network Formulas, and Adjacency Matrix

Assignments due:

- **Wednesday February 24th by 11:59 PM:**
 - 1) Colaboratory notebook assignment 3.3
- **Friday February 26th by 11:59PM:**
 - 1) Problem Set 3.1

Week 6 (Saturday 27th, February to Friday 5th, March)

Lesson 4 (part 1): Histograms of Node Degrees

Assignments due:

- **Wednesday March 3rd by 11:59 PM:**
 - 1) Colaboratory notebook assignment 4.1
- **Friday March 5th by 11:59PM:**
 - 1) Problem Set 4.1

Week 7 (Saturday 6th, March to Friday 12th, March)

Lesson 4 (part 2): Histograms of Node Degrees

Assignments due:

- **Wednesday March 10th by 11:59 PM:**
 - 1) Colaboratory notebook assignment 4.2
- **Friday March 12th by 11:59PM:**
 - 1) Problem Set 4.2

Week 8 (Saturday 12th, March to Friday 19th, March)

- Midterm week:

- Live review Eduardo (Section 1 Thursday 18th, March 1:30 to 2:45 PM)
- Live review Valentin (Section 2 Wednesday 17th, March 3:00 to 4:15 PM)
- Teaching Assistant review sessions: TBA
- **Midterm day (Friday 19th, March Open window: 7AM to 10PM)**
Note: Exam closes at 10PM regardless of the time you start.

Week 9 (Saturday 20th, March to Friday 26th, March)

Lesson 5 (part 1): Paths in Networks

Assignments due:

- **Wednesday March 24th by 11:59 PM:**
 - 1) Colaboratory notebook assignment 5.1
- **Friday March 26th by 11:59PM:**
 - 1) Problem Set 5.1

Week 10 (Saturday 27th, March to Friday 2nd, April)

Lesson 5 (part 2): Paths in Networks

Assignments due:

- **Wednesday March 31st by 11:59 PM:**

1) Colaboratory notebook assignment 5.2

- **Friday April 2nd by 11:59PM:**

1) Problem Set 5.2

Week 11 (Saturday 3rd, April to Friday 9th, April)

Lesson 6: Shortest Paths in Networks

Assignments due:

- **Wednesday April 7th by 11:59 PM:**

1) Colaboratory notebook assignment 6

- **Friday April 9th by 11:59PM:**

1) Problem Set 6

Week 12 (Saturday 10th, April to Friday 16th, April)

Lesson 7 (part 1): Triangles, v-shapes, and clustering

Assignments due:

- **Wednesday April 14th by 11:59 PM:**

1) Colaboratory notebook assignment 7.1

- **Friday April 16th by 11:59PM:**

1) Problem Set 7.1

Week 13 (Saturday 17th, April to Friday 23rd, April)

Lesson 7 (part 2): Triangles, v-shapes, and clustering

Assignments due:

- **Wednesday April 21st by 11:59 PM:**

1) Colaboratory notebook assignment 7.2

- **Friday April 23rd by 11:59PM:**

1) Problem Set 7.2

Week 14 (Saturday 24th, April to Friday 30th, April)

Lesson 7 (part 3): Triangles, v-shapes, and clustering

Assignments due:

- **Wednesday April 28st by 11:59 PM:**

1) Colaboratory notebook assignment 7.3

- **Friday April 30rd by 11:59PM:**

1) Problem Set 7.3

Final day (Tuesday 4th, May Open window: 7AM to 10PM)

Note: Exam closes at 10PM regardless of the time you start.