

3.2 Building the Contagion Model

Heckman Library 406C

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Keywords agent-based modeling, social sciences, computational methods

1. SESSION A (LECTURE)

Contagion models: a brief overview.

- Overview of contagion models: SIR, SEIR, and agent-based approaches.
- Discussions on limitations: norms, emotions, networks.

[Contagion Models \(Slides\)](#)

2. SESSION B (LAB)

Contagion Model in NetLogo.

Building contagion models in NetLogo for spontaneous infections.

- [Slides with some of my research from the past \(some of it might be outdated\)](#)
- Deliverable: Lab memo #4 due next week.

[Netlogo Code - Contagion Model](#)

3. ASSIGNMENT: LAB MEMO #4

Due: 10/16 before class | **Points:** 100 points

Prompt (1-2 pages):

Contagion model implementation & analysis

1. Implement a contagion model in NetLogo using the SEIR framework.
 2. Analyze the model's behavior under different parameters (e.g., transmission rate, recovery rate).
 3. Write your Lab Memo. You can [download the template in here](#).
 4. Make sure you add the codes you've changed, as well as interface modifications.
 5. Submit your Lab Memo in PDF format through Moodle.
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