Team

JProf. Dr. Claudia Wagner
Office Hour: Wed by arrangement
claudia.wagner@gesis.org

Prof. Dr. Markus Strohmaier
Office Hour: Wed by arrangement
markus.strohmaier@gesis.org
Who am I?

- Assistant professor at University of Koblenz-Landau and head of the Data Science team at GESIS
  - GESIS is a Leibnitz Institute for the social sciences
  - Data Science Team is part of the Computational Social Science department
  - My research: social phenomena – e.g. cultural understanding, bias, discrimination; algorithmic biases
What is CSS?

• Understand/explore social systems
  – Mechanisms in social system: How do social systems work?
  – Social issues: What explains/solves social issues?

  – Goal of CSS: Data driven theory development (induction) and data driven theory testing (deduction)
    • Organic data and designed data
Logistics

- Two programming exercise
  - Counts 30% of the total amount of points.
  - Max: 70 points from exam + 30 points from programming exercise
  - You need >=51 of total points to get a positive grade
  - Use Python 3

- Several paper-pen exercises
  - You have to hand them in all except one
  - No points/grades
  - Exercises will help you to prepare for exam
  - You have to hand them in via email until class or bring them into class
Programming Exercise

• Assignment 1: Static Network Analysis
  – Learning Goal: how to compute network statistics and how to interpret them, become familiar with libraries like networkx

• Assignment 4: Network Dynamics
  – Learning Goal: how to implement diffusion models for networks, how do network properties impact the diffusion, how to setup an analysis that allows to answer these questions
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Instructor(s)</th>
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</thead>
<tbody>
<tr>
<td>19.4.</td>
<td>Introduction &amp; Ass 1 <em>(programming exercise)</em></td>
<td>Wagner</td>
</tr>
<tr>
<td>26.4.</td>
<td>Python Tutorial</td>
<td>Wagner</td>
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<tr>
<td>3.5.</td>
<td>Question time for Ass 1 &amp; Repetition of lecture</td>
<td>Wayne, Wagner</td>
</tr>
<tr>
<td>10.5.</td>
<td>Exercises examples</td>
<td>Wayne, Wagner</td>
</tr>
<tr>
<td>17.5.</td>
<td>Correction Ass 1 &amp; Ass 2 <em>(paper and pen work)</em></td>
<td>Wagner, Wayne</td>
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<tr>
<td>24.5.</td>
<td>Ass 2 correction &amp; Ass 3 <em>(paper and pen work)</em></td>
<td>Wayne, Strohmaier</td>
</tr>
<tr>
<td>31.5.</td>
<td>Ass 3 correction</td>
<td>Wayne, Strohmaier</td>
</tr>
<tr>
<td>7.6.</td>
<td>Public Holiday</td>
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<tr>
<td>14.6.</td>
<td>Network Dynamics Tutorials &amp; presentation of Ass 4 <em>(programming exercise)</em></td>
<td>Wagner</td>
</tr>
<tr>
<td>21.6.</td>
<td>Work on Ass 4 &amp; question time for Ass 4</td>
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<tr>
<td>28.6.</td>
<td>Work on Ass 4 &amp; question time</td>
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<tr>
<td>5.7.</td>
<td>Correction Ass 4 &amp; Ass 5 <em>(paper and pen)</em></td>
<td>Strohmaier</td>
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<td>12.7.</td>
<td>Correction Ass 5 &amp; Ass 6 <em>(paper and pen)</em></td>
<td>Strohmaier</td>
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<tr>
<td>19.7.</td>
<td>Correction Ass 6</td>
<td>Strohmaier</td>
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<tr>
<td>26.7.</td>
<td>Final Exam</td>
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Logistics I

- Presentation of Assignment 1 and 4
  - Plagiarism leads to zero points for all groups that are involved
  - We will ask some of you to present their solutions during class and make individual appointments with others (if needed)

- Small paper and pen exercises
  - You should fill them in at home, bring them to class or send them via email; we correct them together in class
Logistics II

• Newsgroup
  – compsosci @ webnews.uni-koblenz.de
  – Check it regularly!

• Materials (slides & assignments & tutorials)
  – https://www.dropbox.com/sh/ugchodae56rl1qx/AAAPYY9Dn-ma2DBLi2V9A1VHa?dl=0
Setup

- Python 3
- ipython and jupyter notebook
- Anaconda Python distribution (includes many useful packages, easy to install, conda package manager)
Questions?