What to do

Work on a project that is inspired on the course exercises.

–The project is formulated in a way that you must solve it in a creative manner

–The dataset(s) to be used is(are) given,

**Your Task**

–Dataset must be analysed

–Approach justified

–Conclusions drawn

–Individual Written report (3 –4 pages)

Structure of the written report (3 to 4 pages)  
  
 Introduction

 Data description + question you want to address

 Method

 Results

 Conclusions

# Topic

Dismantle criminal network (**you should make 5 projects**)Data: Networks representing strengths of relationships among members of criminal networks (e.g. Gang in London, 2005-2009). **See bibliography for which analyses you can do with data, you can choose and be creative and original!!**

Nodes are members, and the edge gives the relationships

Task:

**-Who should be the main targets to capture in order to dismantle the organisation?**

Grund, and J. Densley, "Ethnic homophily and triad closure: Mapping internal gang structure using exponential random graph models." Journal of Contemporary Criminal Justice 31(3), 354-370 (2015) Link

Extra questions asked in class:

As working on the data set for criminal networks, I, and the other students who were assigned with the same project, would like to raise the following question:  
  
- Should we justify why we consider a specific approach rather than another one as well as their shortcomings/ limits ?

yes, that is the idea.

- As far as I understood, we should apply the dynamic analysis instead of the static analysis. However, considering the dynamic approach, how can we take into account the "capacity of criminal networks to adapt" after arrests or activity disruptions?

Usually, - as a first approximation - you consider that there is no adaptation, and that the network remains as it was - except for the removed node -.

- Should we determine ourselves which approach to determine the most valuable targets? (most valuable nodes vs. functionality by example).

The point is that there is not single answer. You can follow multiple strategies. So, linked to your first question, once you have justified saying.. “In this study we consisder …. because ….”, you should follow that logic.

- Considering the high number of "hidden" nodes in terrorist organisation, to what extend should we apply the function to determine 'non-identified nodes' (actual network vs. targeter view) ? Should we simulate the links discovery to 20, 50, 80 or 100 % ?

Use a small value and a large one

The other students are in copy of the email, as I am sure that despite the fact that datasets were randomised, your answers will be of great importance to all of us.

Sure! I only wanted to randomise the networks to avoid that you obtain the same node ID as answer :)