

Descriptive Network Analysis C

–Seminar–

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Learning outcome	Assessment mode
1 Explain the concept of network and list the main network indicators	ESS
2 Describe and apply the major techniques for the collection of network data and their statistical analysis	ESS, GPN + GWS
3 Identify the main characteristics of networks by means of network measures	ESS, GPN + GWS
4 Employ network analysis techniques to produce network data-based infographics	GPN + GWS

Note: ESS: Essay; GPN: Group Presentation; GWS: Group Written Submission

- 1 Brokerage measures [recap]
- 2 Brokerage measures in *igraph*

Brokerage measures [recap]

Brokerage measures [recap]

Measure	Interpretation
Brokerage roles	Coordinator, gatekeeper, itinerant broker, liaison
Effective network size	To what extent a node share ties with other nodes?
Constraint	To what extent a node's action is constrained by other nodes in the ego-network?

Brokerage measures in *igraph*

Brokerage measures in *igraph*

Your source of all igraph functions: <http://igraph.org/r/doc/>

Brokerage measures in *igraph*

Brokerage

Measure	igraph function
Brokerage roles	No function in igraph, but we can use the brokerage(...) function from the “ sna ” package
Effective network size	No function in igraph, but we can use the ens(...) function from the “ influenceR ” package
Constraint	constraint(...)

Next time ...

- **Lecture: Principles of infographics**

- ▶ Principles and good practices to generate infographics
- ▶ Network layout algorithms

- **Seminar: Principles of infographics**

- ▶ Network layout algorithms in igraph
- ▶ Import data in Gephi
- ▶ Visualise and analyse networks in Gephi