



▶ Graph algorithms?

▶ Schedule

- 14 weeks
- Course: Mon. 11am (room 301)
- Exercises: Mon. 2pm (room 301)

▶ Evaluation

- Exam
- Mini-course

▶ People

- Arnaud Casteigts (course)  
arnaud.casteigts@unige.ch
- Himika Das (exercises)  
himika.das@unige.ch

▶ Resources

- <https://arnaudcasteigts.net/teaching/>
- + Moodle (exercises, communication)

▶ Content (indicative)

1. Definitions and basic concepts
2. Traversals, connectivity testing, shortest paths
3. Minimum spanning trees and matroids
4. Basics of computational complexity (NP-hardness, reductions, etc.)
5. Graph coloring, Independent sets, Cliques
6. Maximum matchings
7. Approximation algorithms
8. Random walks & Markov chains
9. Distributed graph algorithms
10. Temporal graph theory (I)
11. Temporal graph theory (II)
12. Temporal graph theory (III)  
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13. Student presentations (I)
14. Student presentations (II)