Nodes:

- 1. General Organic Chemistry (root node)
- 2. Introduction to Organic Chemistry
- 3. Nomenclature
- 4. IUPAC Rules
- 5. Functional Groups
- 6. Isomerism
- 7. Structural Isomerism
- 8. Stereoisomerism
- 9. Chemical Bonding
- 10. Sigma (σ) Bond
- 11. Pi (π) Bond
- 12. Hybridization
- 13. Inductive and Electromeric Effects
- 14. Inductive Effect (I effect)
- 15. Electromeric Effect (E effect)

Edges:

- 1. General Organic Chemistry → Introduction to Organic Chemistry (topic)
- 2. General Organic Chemistry → Nomenclature (topic)
- 3. Nomenclature → IUPAC Rules (subcategory)
- 4. Nomenclature → Functional Groups (subcategory)
- 5. IUPAC Rules → Rule 1 (detail)
- 6. IUPAC Rules → Rule 2 (detail)
- 7. IUPAC Rules → Rule 3 (detail)
- 8. Functional Groups → Hydroxyl (example)
- 9. Functional Groups → Carboxyl (example)

- 10. Functional Groups → Aldehyde (example)
- 11. Functional Groups → Ketone (example)
- 12. General Organic Chemistry → Isomerism (topic)
- 13. Isomerism → Structural Isomerism (subcategory)
- 14. Isomerism → Stereoisomerism (subcategory)
- 15. Structural Isomerism → Chain Isomerism (type)
- 16. Structural Isomerism → Position Isomerism (type)
- 17. Structural Isomerism → Functional Isomerism (type)
- 18. Structural Isomerism → Metamerism (type)
- 19. Stereoisomerism → Geometric Isomerism (type)
- 20. Stereoisomerism → Optical Isomerism (type)
- 21. General Organic Chemistry → Chemical Bonding (topic)
- 22. Chemical Bonding \rightarrow Sigma (σ) Bond (subcategory)
- 23. Chemical Bonding \rightarrow Pi (π) Bond (subcategory)
- 24. Chemical Bonding → Hybridization (subcategory)
- 25. Sigma (σ) Bond \rightarrow Definition (detail)
- 26. Pi (π) Bond \rightarrow Definition (detail)
- 27. Hybridization → Types (detail)
- 28. General Organic Chemistry → Inductive and Electromeric Effects (topic)
- 29. Inductive and Electromeric Effects → Inductive Effect (I effect) (subcategory)
- 30. Inductive and Electromeric Effects → Electromeric Effect (E effect) (subcategory)
- 31. Inductive Effect (I effect) → +I effect (type)
- 32. Inductive Effect (I effect) → -I effect (type)
- 33. Electromeric Effect (E effect) → +E effect (type)
- 34. Electromeric Effect (E effect) → -E effect (type)

Note: The edges represent the hierarchical relationships between the nodes. $A \rightarrow B$ means that node A has a child node B. Not to be included in the graph.