

# Chemistry 30A: Suggested Reading and Practice Problems

## Organic Chemistry 5<sup>th</sup> edition (Brown, Foote, Iverson, and Anslyn)

<u>Lecture Topic</u>	<u>Reading</u>	<u>Problems</u>
Bonding and Structure of Organic Molecules	Chapter 1: Sections 1–3 and 5	Chapter 1: 1–12, 14, 20–37, 41–50, and 64–66
Molecular Geometry and Hybrid Orbitals	Chapter 1: Sections 4, 6, and 7	Chapter 1: 13, 15, 38–40, 56–59, 67, and 68
Molecular Representations, Nomenclature, and Isomers	Chapter 2: Sections 1–4A	Chapter 2: 1–5 and 16–28
Molecular Flexibility	Chapter 2: Sections 5 and 6A	Chapter 2: 8–14, 32–36, 42–44, 48, and 50–52

## Organic Chemistry 4<sup>th</sup> edition (Brown, Foote, Iverson, and Anslyn)

<u>Lecture Topic</u>	<u>Reading</u>	<u>Problems</u>
Bonding and Structure of Organic Molecules	Chapter 1: Sections 1–3 and 5	Chapter 1: 1–12, 14, 19–36, and 59–61
Molecular Geometry and Hybrid Orbitals	Chapter 1: Sections 4, 7, and 8	Chapter 1: 13, 18, 37–49, 55–58, 62, and 63
Molecular Representations, Nomenclature, and Isomers	Chapter 2: Sections 1–4A and 5	Chapter 2: 1–5 and 16–28
Molecular Flexibility	Chapter 2: Sections 6 and 7A	Chapter 2: 8–14, 32–36, 40–42, 46, and 48–50

## Organic Chemistry Structure and Function 4<sup>th</sup> edition (Vollhardt and Schore)

<u>Lecture Topic</u>	<u>Reading</u>	<u>Problems</u>
Bonding and Structure of Organic Molecules	Chapter 1: Sections 1–4 Chapter 2: Section 3	Chapter 1: 3, 4, 6, 7, 19a, 21–24, 29, 43, 44a–c Chapter 2: 25, 27 Chapter 4: 36
Molecular Geometry and Hybrid Orbitals	Chapter 1: Sections 3 and 6–8	Chapter 1: 5, 13, 19b, 31–37, 44d–g
Molecular Representations, Nomenclature, and Isomers	Chapter 1: Section 9 Chapter 2: Sections 4 and 5 Chapter 4: Section 1	Chapter 1: 15–18 and 38 Chapter 2: 12, 13, 15, 16, 20a, 29, 30a–g, 31, and 32 Chapter 4: 2 and 17–19
Molecular Flexibility	Chapter 2: Sections 7 and 8 Chapter 4: Sections 2–4	Chapter 2: 18, 19, 20b, 36, 37, 48, and 49 Chapter 4: 3, 5, 9, 15ab, 22, 23, 25, 28, 30–33, 34a, 41, and 47–49

## Organic Chemistry as a Second Language 2<sup>nd</sup> Edition (Klein)

<u>Lecture Topic</u>	<u>Reading</u>	<u>Problems</u>
Bonding and Structure of Organic Molecules	Chapter 1: Sections 5 and 6	Chapter 1: 33–68
Molecular Geometry and Hybrid Orbitals	Chapter 4: All	Chapter 4: All
Molecular Representations, Nomenclature, and Isomers	Chapter 1: Sections 1–3 Chapter 5: Sections 3, 4, and 6	Chapter 1: 1–24 Chapter 5: 19–27, 29–32, 34, 47–55, 61
Molecular Flexibility	Chapter 6: All	Chapter 6: All