

OC II Stoffaufteilung für die Kolloquien

Studierende BSc. Chemie

Lehrbuch: Clayden, Greeves, Warren

Englische Ausgaben

J. Clayden, N. Greeves, S. Warren, P. Wothers, *Organic Chemistry*, Oxford Press, 1st Edition 2001

J. Clayden, N. Greeves, S. Warren, *Organic Chemistry*, Oxford Press, 2nd Edition 2012

Deutsche Ausgabe

J. Clayden, N. Greeves, S. Warren, *Organische Chemie*, Springer Spektrum, 2. Auflage 2013

OC II Stoffaufteilung für die Kolloquien

Studierende BSc. Chemie

Prüfungsstoff: Angaben für Auflage von 2001

Thema	Kolloq	Kapitelnummer / Inhalt
Substitution am gesättigten Kohlenstoff/Radikalreaktionen	1.Kolloq	16 Stereochemistry 17 Nucleophilic substitution at saturated carbon 39 Radical reactions
Additionen/Eliminierung	1.Kolloq	19 Elimination reactions 20 Electrophilic addition to alkenes
Aromaten	1.Kolloq	22 Electrophilic aromatic substitution 43 Aromatic heterocycles 1: structures and reactions
Olefinierungen	1. Kolloq	31 Controlling the geometry of double bonds
Organometallchemie	2.Kolloq	09 Using organometallic reagents to make C-C bonds 47 Organo-main-group chemistry II: boron, silicon, and tin 48 Organometallic chemistry
Carbonylchemie I	2.Kolloq	06 Nucleophilic addition to the carbonyl group 10 Conjugate addition 12 Nucleophilic substitution at the carbonyl (C=O) group 14 Nucleophilic substitution at C=O with loss of carbonyl oxygen 21 Formation and reactions of enols and enolates 26 Alkylation of enolates
Carbonylchemie II	3.Kolloq	27 Reactions of enolates with aldehydes and ketones: the aldol reaction 28 Acylation at carbon 29 Conjugate addition of enolates 34 Diastereoselectivity
Pericycliche Reaktionen	3.Kolloq	35 Pericyclic reactions 1: cycloadditions 36 Pericyclic reactions 2: sigmatropic and electrocyclic reactions 37 Rearrangements 38 Fragmentation
Heterocyclen	3.Kolloq	44 Aromatic heterocycles 2: synthesis
Oxidationen und Reduktionen	3.Kolloq	24 Chemoselectivity: selective reactions and protection

OC II Stoffaufteilung für die Kolloquien

Studierende BSc. Chemie

Prüfungstoff: **Angaben für Auflagen von 2012 und 2013 (Kapitelverteilung in englischer und deutscher Fassung ist identisch)**

Thema	Kolloq	Kapitelnummer / Inhalt
Substitution am gesättigten Kohlenstoff/Radikalreaktionen	1.Kolloq	14 Stereochemistry 15 Nucleophilic substitution at saturated carbon 37 Radical reactions
Additionen/Eliminierung	1.Kolloq	17 Elimination reactions 19 Electrophilic addition to alkenes
Aromaten	1.Kolloq	21 Electrophilic aromatic substitution 29 Aromatic heterocycles 1: structures and reactions
Olefinierungen	1. Kolloq	27 Sulfur, silicon, and phosphorus in Organic Chemistry
Organometallchemie	2.Kolloq	09 Using organometallic reagents to make C-C bonds 40 Organometallic chemistry
Carbonylchemie I	2.Kolloq	06 Nucleophilic addition to the carbonyl group 22 Conjugate addition and nucleophilic aromatic Substitution 10 Nucleophilic substitution at the carbonyl (C=O) group 11 Nucleophilic substitution at C=O with loss of carbonyl oxygen 20 Formation and reactions of enols and enolates 25 Alkylation of enolates
Carbonylchemie II	3.Kolloq	26 Reactions of enolates with aldehydes and ketones: the aldol and Claisen reactions 33 Diastereoselectivity
Pericyclic Reaktionen	3.Kolloq	34 Pericyclic reactions 1: cycloadditions 35 Pericyclic reactions 2: sigmatropic and electrocyclic reactions 36 Participation, rearrangement and fragmentation
Heterocyclen	3.Kolloq	30 Aromatic heterocycles 2: synthesis
Oxidationen und Reduktionen	3.Kolloq	23 Chemoselectivity and protecting groups