

Course description

Course Title
Recent Synthetic Methods
Métodos Sintéticos Recentes

Type/Attendance Time	Credit points (ECTS)	Type of Examination	
Lecture: 3 hours per week	6	Written exam	
Tutorial: 1 hour per week			

Recommended Prerequisites

none

Content

- 1. Introduction to stereochemistry
- 2. Diastereoselective Reactions
 - Conformational analysis
 - Stereocontrol in cyclic systems
 - Diastereoselective addition to carbonyl compounds
 - Directed reactions
 - Aldol reactions
 - Enolate alkylation, oxidation, amination reactions
 - Diastereoselective olefin functionalization
- 3. (Transition) metals in organic synthesis
 - Principles of catalysis, enantioselective transformations
 - Palladium-catalyzed processes
 - Lewis acids in organic synthesis
 - Metal-mediated redox reactions
 - Ligand design
- 4. Retrosynthetic strategies

Conteúdo

- 1. Introdução à estereoquímica;
- 2. Reações diastereoseletivas;
- 3. Metais (transição) em síntese orgânica;
- 4. Estratégias retrossintéticas.