***Lënda:*Stereokimia e Komponimeve Organike**

**Mësimdhënësi: Dr.sc. Hamit Ismaili**

**Statusi i lëndës: obligative**

**ECTS kredi:6**

**Përmbajtja e lëndës:** Kjo lëndë (Stereokimia e komponimeve organike) studion llojet e ndryshme organike, stereoizomerët, reaksionet stereoselektive dhe stereospecifike, proceset e racemizimit, ndikimi I substituentëve në kë to lloje te reaksioneve kimike etj.

**Qëllimi i lëndës:**

* Tëkrijojënjohuripraktiketëmjaftueshmembikëtëkurs.
* Tëzhvillojnjohuritëmjaftueshmesiteorikeashtuedhepraktike
* Tëpamvarësohetpërpunëlaboratorike
* dhetëformojdijedheshkathtësimbisintezen e komponimeveorganike, zbatimin e këtyrekomponimeveorganikenëpraktikë(mjekësi).

***Rezultatet e pritura të nxënies***: Me anë të këtij kursi bëhet aftësimi i studentëve si nga pjesa teorike poashtu edhe praktike. Studentëtgjatëkëtij kursi fitojnë njohurinë lidhje menomenklaturënstereokimike, klasifikimin eobjektevenë lidhje mesimetri, desimetrizimin, mundesit kirooptiketekomponimeveorganike, ndarjastereoisomere, dhe parimetpër sintezënstereoselektive.Përtëiparaqiturkëtotëarriturapërdorenfjalet:njeh, përshkruan, krahason, projekton, harton, zhvillonetj.

**Metodologjia e mësimdhënjes:** Ligjërata, ushtrime laboratorike, punime laboratorike.

**Metodat e vlerësimit:**

* Vëlerësimi pas kollokviumittë pare 30%
* Vëlerësimipasëkollokviumittëdytë 25%
* Angazhimettjera 10%
* Vijimiirregullt 5%
* Provimi final 30%
* **Total 100%.**

**Mjetet e konkretizimit:** Lapsi, Tabela, Projektori,

**Raportindërmjetpjesësteorikedheushtrimeveështë 2:3**

**Literatura bazë:**

1. M. B. Smith, March's Advanced Organic Chemistry: Reactions, Mechanisms, and Structure, John Wiley & Sons, Inc., New Jersey, 2013.
2. Maitland Jones, Jr., Princeton University, Organic Chemistry, second edition, 2000
3. F. A. Carey, R. J. Sundberg, Advanced Organic Chemistry: Part A: Structure and Mechanisms, Springer Science & Business Media, New York, 2000.
4. IUPAC, Commision on Nomenclature of Organic Chemistry, Commision on Physical Organic Chemistry, Basic Terminology of Stereochemistry (Recommendations 1996), Pure & Appl. Chem. 1996, 68, 2193

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| **Kontributinёngarkesёn e studentit ( gjёqёduhettёkorrespondoj me rezultatet e tёnxёnittёstudentit)** |
| **Aktiviteti** | **Orë** | **Ditë/javë** | **Gjithësej** |
| Ligjërata | 2 | 15  |  30 |
| Ushtrimeteorike/laboratorike | 3 | 15  | 45 |
| Punëpraktike | 1 | 1 | 15 |
| Kontaktet me mësimdhënësin/konsultimet | 2 | 5 | 10 |
| Ushtrimenëteren | 2 | 2 | 4 |
| Kollokfiume,seminare | 2 | 5 | 10 |
| Detyratështëpisë | 1 | 5 | 5 |
| Koha e studimitvetanaktëstudentit (nëbibliotekëosenështëpi) | 2 | 5 | 30 |
| Përgaditjapërfundimtarepërprovim | 2 | 5 | 10 |
| Koha e kaluar në vlerësim (teste,kuiz,provim final) | 2 | 5 | 10 |
| Projektet,prezentimet ,etj | 2 | 3 | 6 |
| **Totali** |  |  | **175 orë** |

**Subject:Stereochemistry of Organic Compounds**

**Teacher of course: Dr. sc. Hamit Ismaili**

**Course status: Mandatory**

**Credit value – ECTS: 6**

**Course Content:** This course (the stereochemistry of organic compounds) study the different types of organic reaction, stereoisomers, stereoselective and stereospecific reactions, racemization processes, the impact of substituents in these types of chemical reactions, etc.

**Course objectives:**

Throughthis coursestudentstrain aswell as thetheoretical andpractical part. Students during this course acquire knowledge about stereochemical nomenclature, classification of objects with regard to symmetry, desymmetrizations, chiroptical properties of organic compounds, separation of stereoisomers, and principles for stereoselective synthesis. To presented these achievementsusedthe words: recognizes, describes, compares, projects, designs,develops, etc.

**Learning outcomes**:

* Provide sufficient practical knowledge on this subject
* To develop sufficient knowledge as theoretical well as practical
* To have good skills in laboratory
* And create knowledge and skills for synthesis and implementationof these organic compounds in practice (medicine)

**Methodology of teaching:**

Lectures, laboratory exercise and laboratory work**.**

**Assessment methods:**

* Estimated after first colloquium 30%
* Estimated after second colloquium 25%
* Other commitments 10%
* Regular attendance 5%
* Final exam 30%
* **Total 100%.**

**Concrete tools:** Pencil, Table, Projector and laboratory

**The ratio between the theoretical and exercises:2:3**

**Basic literature:**

1. M. B. Smith, March's Advanced Organic Chemistry: Reactions, Mechanisms, and Structure, John Wiley & Sons, Inc., New Jersy, 2013.
2. Maitland Jones, Jr., Princeton University, Organic Chemistry, second edition, 2000
3. F. A. Carey, R. J. Sundberg, Advanced Organic Chemistry: Part A: Structure and Mechanisms, Springer Science & Business Media, New York, 2000.
4. IUPAC, Commision on Nomenclature of Organic Chemistry, Commision on Physical Organic Chemistry, Basic Terminology of Stereochemistry (Recommendations 1996), Pure & Appl. Chem. 1996, 68, 2193

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| **Contribution on student load (must correspond with learning outcomes)** |
| **Activity** | **Hours** | **week** | **Total /hours**  |
| Lectures | 2 | 15 week |  30 |
| Exercise theoretical/laboratory | 3 | 15 week | 45 |
| Practice work | 1 | 1 | 15 |
| Contact with lecturer/consultations | 2 | 5 | 10 |
| Field exercises | 2 | 2 | 4 |
| Mid-terms, seminars | 2 | 5 | 10 |
| Homework | 1 | 5 | 5 |
| Individual time spent studying (at the library or home) | 2 | 5 | 30 |
| Final preparation for the exam | 2 | 5 | 10 |
| Time spent in evaluation (tests, quiz, final exam) | 2 | 5 | 10 |
| Projects, presentations, etc. | 2 | 3 | 6 |
| **Total** |  |  | **175 hour** |