



Course Syllabus

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| Course Code | Course Title | ECTS Credits |
| IMMU-540 | Immunotherapy | 7.5 |
| Prerequisites | Department | Semester |
| IMMU-541 | Life Sciences | Spring |
| Type of Course | Field | Language of Instruction |
| Concertation - Immunology | Biomedical Sciences | English |
| Level of Course | Lecturer(s) | Year of Study |
| 2 nd Cycle | Dr. Eleni Xenophontos Dr. Stella Nicolaou | 1 st |
| Mode of Delivery | Work Placement | Corequisites |
| Face-to-face | N/A | None |

Course Objectives:

This course offers an in-depth exploration of the principles and applications of immunotherapy. Students will delve into the latest advancements in strategies for treating solid tumors, gain insights into the spectrum of immune-related adverse events, and formulate approaches to counter unique challenges associated with immunotherapy. The course emphasizes the significance of understanding various forms of immunotherapy, their clinical indications, and contraindications. Additionally, it underscores the value of interprofessional collaboration for optimizing patient outcomes and minimizing adverse events, all while recognizing the critical role of patients' perspectives and translational research in the field.

Learning Outcomes:

- Upon completion of this course, students should be able to:
1. Understand the basic principles and mechanisms of immunotherapy.
 2. Identify various types of immunotherapies and their applications in different diseases.
 3. Analyze the benefits and limitations of different immunotherapeutic strategies.
 4. Understand the development process of new immunotherapies, including preclinical and clinical trial stages.
 5. Discuss some of the contraindications to various forms of immunotherapy.
 6. Apply knowledge of immunotherapy to real-world case studies.

Course Content:

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| 1. | Introduction to Immunotherapy |
| 2. | Principles and Mechanisms of Immunotherapy |
| 3. | Immune Checkpoint Inhibitors |
| 4. | CAR-T Cell Therapy |
| 5. | Therapeutic Monoclonal Antibodies |
| 6. | Immunotherapy in Hematological Diseases |
| 7. | Immunotherapy in Immunological Diseases |
| 8. | Development of New Immunotherapies |
| 9. | Case Studies in Immunotherapy |
| 10. | Future Perspectives in Immunotherapy |
| 11. | Course Review and Exam Preparation |

Learning Activities and Teaching Methods:

Lectures, presentations, and discussions of immunotherapy techniques: Multimedia resources, including video presentations, will offer insights into the practical applications of technology and the workings of analytical instruments in the field of immunotherapy.

Assessment Methods:

Assignments, mid-term and final examinations

Required Textbooks / Readings:

| Title | Author(s) | Publisher | Year | ISBN |
|---------------|----------------------------|-----------|------|---------------------------|
| Immunotherapy | Aung Naing, Joud Hajjar | Springer | 2020 | 978-3-030-41008-7 (ebook) |

Recommended Textbooks / Readings:

| Title | Author(s) | Publisher | Year | ISBN |
|-------------------------------|-------------------|-------------------------|------|-------------------------|
| The Immunotherapy Revolution: | Jason R. Williams | Independently published | 2019 | ISBN-13: 978-1700114938 |