



University of Nicosia, Cyprus

Course Code IMMU-545	Course Title Immunodeficiency Disorders and Control	ECTS Credits 7
Department Life and Health Sciences	Semester Spring/Summer	Prerequisites IMMU-541 Cellular and Molecular Immunology
Type of Course Elective	Field Biomedical Sciences	Language of Instruction English
Level of Course 2 nd Cycle	Year of Study 1 st	Lecturer Nicolaou Stella Nicolaidou Vicky
Mode of Delivery Face to Face	Work Placement N/A	Co-requisites None

Objectives of the Course:

The aim of this course is to correlate the clinical manifestation of immunodeficiency disorders with the development and function of the cells of the immune system. The specific aims of the course are:

- To communicate the multilevel origin of immunodeficiency disorders.
- To related the role of immune cell development with malfunction of the immune system.
- To promote the most recent scientific knowledge on the molecular basis of immunodeficiency disorders
- To demonstrate the correlations of laboratory tests with the clinical manifestations/symptoms of the disorders.

Learning Outcomes:

On completion of this course, the student will be able to:

- Describe the major categories of immunodeficiency disorders
- Identify the molecular basis of immunodeficiency disorders.
- Discuss secondary or acquired immunodeficiency disorders with emphasis on AIDS
- Describe and discuss immunodeficiency disorders with reference to laboratory diagnostic test required.
- Review and interpret immunology diagnostic tests result.
- Correlate the genetic and environmental factors with the development of

immunodeficiency disorders

Course Contents:

1. Recurrent Infections
2. Combined T and B cells immunodeficiencies
3. Predominantly Ab deficiencies
4. Disorders of Phagocytic cells
5. Immune dysregulation diseases
6. Defects of Innate Immunity: Receptors and signaling components
7. Autoinflammatory disorders
8. Complement deficiencies
9. Immunology and associated genetic syndromes
10. Immunodeficiency resulting from malnutrition, metabolic disorders, therapeutic and environmental immunosuppression and stress
11. Immunodeficiency of immaturity, immune mechanisms in infectious disease, and infection with the human immunodeficiency virus

Learning Activities and Teaching Methods:

Lectures; problem based learning, poster and/or oral presentations. The lecturer will be introducing each topic through lectures and problem based learning sections with individual tasks related to data analysis.

Assessment Methods:

Assignments, Presentations, Tests and Mid-term Exam/Paper; Final Exam

Required Textbooks/Reading:

Authors	Title	Publisher	Edition	ISBN
Hans D. Ochs MD Dr.med, C. I. Edvard Smith PhD, Jennifer M. Puck MD	Primary Immunodeficiency Diseases: A Molecular and Genetic Approach	Oxford University Press, USA	3 edition (2013)	ISBN-10: 0195389832 ISBN-13: 978- 0195389838

Recommended Textbooks/Reading:

Authors	Title	Publisher	Edition	ISBN
Asghar Aghamohammadi, Nima Rezaei	Clinical Cases in Primary Immunodeficiency Diseases: A Problem- Solving Approach	Springer;	2013 ed	ISBN-10: 3642317847 ISBN-13: 978- 3642317842
E. Richard Stiehm, Hans D. Ochs, Jerry A. Winklestein	Immunologic Disorders in Infants and	Saunders	5 ed. (2004)	ISBN-10: 0721689647 ISBN-13: 978-

	Children			0721689647
Nima Rezaei, Asghar Aghamohammadi, Luigi D.Notarangelo	Primary Immunodeficiency Diseases: Definition, Diagnosis, and Management	Springer	2008 edition	ISBN-10: 354078537X ISBN-13: 978- 3540785378