

Tehran University of Medical Sciences INTERNATIONAL CAMPUS

Total Units of Ph.D. Classes

Core- 27 Units **Non-Core**- Maximum 3 Units Dissertation- 20 Units

Pre-requisite Classes for the Medical Genetics Ph.D. Program

Human Genetics- 2 Units- 34 hrs. Theory Molecular Genetics- 2 Units- 34 hrs. Theory Cytogenetics- 2 Units- 34 hrs Theory Genetic Engineering- 2 Units-Immunogenetics- 2 Units- 34 hrs Theory Cancer Genetics- 2 Units- 34 hrs Theory Population Genetics- 2 Units- 34 hrs Theory Behavior Genetics- 2 Units- 34 hrs Theory

Core Classes for the Medical Genetics Ph.D. Program

Class Code	Name	Total Units	Theory hrs	Lab hrs	Internship hrs	Total	Pre- requisite
09	Adv. Molecular Genetics	2	34			34	14
10	Genetic Counseling*	2	17	34		51	*
11	Genetic Engineering and Adv. Molecular Biotechnology	3	34	34		68	
12	Adv. Cytogenetics	3	34	34		68	
13	Adv. Mol. Cytogenetics	2	34			34	14
14	Adv. Mol. Genetics	3	34	34		68	12
15	Adv. Cancer Genetics	2	34			34	12, 14, 16
16	Adv. Immuno- Genetics	2	34			34	12, 14
17	Hospital Specialty Internship	8			544	544	12 to 17
18	Dissertation	20					
	Total	47					

*Genetic Counseling along with Hospital Specialty Internship will be offered in one semester after the completion of all above mentioned classes.

Non-Core Classes for the Medical Genetics Ph.D. Program

Class Code	Name	Total Units	Theory- hrs	Lab- hrs	Total
19	Micro-organism Genetics	2	2		34
20	Human Biochemical Genetics	2	2		34
21	Ethics and Biosafety	2	2		34
22	Cytoplasmic and Somatic Genetics	1	1		17
23	Sign and Symptom Recognition in Disease	1	1		17



Medical Genetics Tehran University of Medical Sciences

Ph.D. Semester I- Second Half of Academic Year 1389-90 (Spring 2011)

Cytogenetics* – 2 Units- Dr. Shakoori Coordinator Cancer Genetics*- 2 Units- Dr. Akrami Coordinator Genetic Engineering*- 2 Units- Dr. Heidari Coordinator Human Genetics*- 2 Units- Dr. Derakhshandeh Coordinator IT and Bioinformatics- 1 Unit- Dr. Keramatipour Coordinator Advanced Cytogenetics- 2 Units- Dr. Mehdipour Coordinator Molecular Medicine/ Advanced Molecular Medicine- 2 Units- Dr. Tavakkoly

* Pre-requisite for Ph.D. candidates with the M.D. degree.

Ph.D. Semester II- First Half of Academic Year 1390-91 (Fall 2011)

Adv. Molecular Genetics- 3 Units- Dr. Tabrizi Coordinator Adv. Mol. Genetic Engineering and Biotechnology- 3 Units- Dr. Modarressi Adv. Mol. Cytogenetics- 2 Units- Dr. Noori-Daloii Coordinator Adv. Medical Genetics- 2 Units- Dr. Keramatipour Coordinator Adv. Immunogenetics- 2 Units- Dr. Zamani Coordinator

Ph.D. Semester III- Second Half of Academic Year 1390-91 (Spring 2012)

Medical Genetics (2)- 3 Units- Dr. Ghaffari Coordinator Cancer Genetics (2)- 3 Units- Dr. Mehdipour Coordinator Molecular Cytogenetics- 3 Units- Dr. Noori-Daloii Coordinator Molecular Medicine/ Adv. Mol. Medicine- 2 Units- Dr. Tavakkoly Coordinator

Ph.D. Semester IV- First Half of Academic Year 1391-92 (Fall 2012)

Genetic Engineering (2)- 3 Units- Dr. Modarressi Coordinator Dissertation- 23 Units- Dissertation Supervisor