

Program of PhD of Clinical Biochemistry

Clinical Biochemistry I

Fall semester 2019

Total hours: 36 h

Sunday 10 to 12 and/or 14-16

Start 29 Sep. 2019 (7 Mehr 1398)

Cardiovascular system (8 hours)

Dr. Mozafari

1	Anatomy and cardiac function	2 h
2	Cardiac disease A. Congestive heart failure (diagnosis, biochemical markers, procedures) 3 h B. Acute coronary syndrome, AMI (diagnosis, biochemical markers, procedures) 3 h	
	Kidney (12 hours) Prof. Vaisi-Raygani Prof. Jalili	
1	Anatomy of the kidney	2 h
2	Kidney function and physiology	2 h
3	Water, electrolytes and acid base balance and related disorders (tests and interpretation)	4 h
4	Pathophysiology of kidney disease and biochemical markers measurement and interpretation	4 h
	Hematology (16 hours) Prof. Rahimi Dr. Maleki	
1	CBC indices and blood film examination	3 h
2	Leukocytic disorders	3 h
3	Biosynthesis, structure, function and degradation of Hb	2 h
4	Anemia (tests and interpretation)	3 h
5	Hemoglobinopathies (tests and interpretation)	2 h
	Polycythemia (tests and interpretation)	1h
6	The porphyrias (tests and interpretation)	2 h

One month training in hospital (Participation in morning reports and grand rounds)

Evaluation: 40% contribution in class discussion, 40% final exam, 20% hospital report

References

1- Tietz Textbook of Clinical Chemistry and Molecular Diagnostics (Last edition).

2-Henry,s Clinical Diagnosis and Management by Laboratory Methods, ,Richard A. Mcpherson MD and Matthew R. Pincus MD, PhD (Last Edition)