Optional subjects

No.	Subject name	Subject teacher	Teaching hours	Form of credit	Credit points (ECTS)
1.	Coordination chemistry	Prof. dr hab. P. Kita, dr hab. G. Wrzeszcz, dr hab. A. Katafias	15	E	3
2.	Reaction mechanisms of inorganic compounds	Prof. dr hab. P. Kita, dr hab. A. Katafias	15	E	3
3.	Molecular modeling **- organized every 2 years**	Prof. dr hab. W. Nowak	30	E	3
4.	Modern separation methods	Prof. dr hab. B. Buszewski	45 (15h lecture +30h lab)	E	3
5.	Structural proteomics	Prof. dr hab. A. Wojtczak	15	E	3
6.	Molecular spectroscopy	Prof. dr hab. E. Szłyk, dr hab. P. Jankowski	30 (15h lecture +15h lab)	E	3
7.	Free radicals in chemistry, biology and medicine	Prof. dr hab. H. Kaczmarek, prof. dr hab. A. Sionkowska	15	E	3
8.	Advanced methods of instrumental analysis	Prof. dr hab. E. Szłyk	30 (15h lecture +15h lab)	E	3
9.	Selected methods of structural analysis of small molecular compounds and biomacromolecules. From biology, through physics, to chemistry	Prof. dr hab. A. Wojtczak	15	E	3
10.	Statistical and numerical methods in chemistry	Prof. dr hab. Stanisław Koter	15 Lecture and practice	E	3
11.	Methods of computational chemistry	Dr Anna Kaczmarek-Kędziera, dr Dariusz Kędziera	30	E	3
12.	Chemical, physical and biological aspects of nanomaterials	Prof. dr hab. A. Terzyk, dr hab. P. Gauden	15	E	3
13.	Selected problems of nanochemistry of inorganic hybrid and polymer materials	Dr hab. P. Piszczek, prof. UMK, prof. dr hab. H. Kaczmarek	15	E	3
Lectures organized every 4 years					
1.	Supramolecular chemistry	Prof. dr hab. W. Radecka-Paryzek	15	E	3
2.	Modern materials	Prof. dr hab. W. Stańczyk	15	E	3
3.	NMR spectroscopy	Prof. dr hab. M. Potrzebowski	15	E	3
Visiting professor lectures					
	Obligatory for students of 2nd and 3rd year		30	E	6

E – exam with a grade