Title:	**Analysis and food contamination**
Lecture hours:	30h – laboratory classes
Study period: (summer/winter)	winter
Number of credits:	3
Assessment methods:	Test
Language of instruction:	English
Prerequisites:	None
Course content:	• Detection of aminoacids, proteins, carbohydrates and lipids • Nitrate and nitrite in vegetable •Bacteriological analysis of dairy cows quarter milk • Determination of sulphites in wine • Determination of phosphoric acid content in soft drinks • Determination of vitamin C concentration in fruit juices • Determination of total protein in milk
Learning outcomes:	Students learn methods for qualitative and quantitative analysis of food (basic components: protein, lipids, carbohydrates, vitamins). They learn the methods of determination the biological contamination of food. Students will learn the methods of analysis (classical and instrumental) used in the determination of acidifying agents, food preservative and compare the results with the declarations of manufacturers and reference regulation.
Name of lecturer:	dr hab. Magdalena Twarużek, Associate Professor mgr inż. Ewa Zastempowska
Contact (email address):	twarmag@ukw.edu.pl
Literature:	Mitra S., Sample Preparation Techniques in Analytical Chemistry, John Wiley & Sons, Hoboken 2003; Ahuja S., Jespersen N., Modern Instrumental Analysis (in. Comprehensive Analytical Chemistry – Vol. 47), Elsevier, Amsterdam 2006 Hodgson E., A Textbook of modern Toxicology 3rd Edition, John Wiley & Sons, Hoboken 2004; Mulroney S., Myers A. Netter's Essential Physiology. Elsevier, 2009 Pico Yolanda, Food Contaminants and residue analysis, Comprehensive Analytical Chemistry, Vol. 51, Elsevier, 2008; Samson R.A., Houbraken J., Thrane U., Frisvad J.C., Andersen B., Food and Indoor Fungi, CBS-KNAW Utrecht, 2010; Berg J.M., Tymoczko J.L., Stryer L., Biochemistry, W.H. Freeman & Co Ltd, 2002.