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| Course title in English | Nobel Prize in Chemistry |
| Course title in Polish | Nagrody Nobla w dziedzinie chemii |
| Course code | |
| Type of course | Lecture |
| Level of course | PhD |
| Year of study | 1-4 |
| Semester/trimester | 1/3/5/7 |
| Number of hours/credits allocated | 30/2 |
| Name of lecturer | Sylvia Rodziewicz-Motowidło, Ewa Wieczerzak |
| Objective of the course (expected learning outcomes and competences to be acquired) | <p><u>Knowledge:</u></p> <ol style="list-style-type: none"> 1. student knows the life story of Alfred Nobel and knows how the Nobel Prize was established, 2. student knows the rules of granting the Nobel Prize in the field of chemistry, 3. student knows at least twenty Nobel Prize Laureates in the field of chemistry, 4. student presents interesting facts about the life of Nobel Prize Laureates in the field of chemistry, 5. student characterizes the groundbreaking discoveries made by the Nobel Prize Laureates, 6. student divides the discoveries made by the Nobel Prize Laureates into chemistry sections, 7. student uses chemical, physicochemical and biological terminology to the extent necessary to present issues related to the discoveries of Nobel Prize Laureates in the field of chemistry <p><u>Skills:</u></p> <p>The doctoral student uses the acquired knowledge on the Nobel prizes discoveries.</p> <p><u>Social competence:</u></p> <ol style="list-style-type: none"> 1. student understands the need for continuous education, 2. student discusses the most important discoveries in chemistry, |

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| | <ol style="list-style-type: none"> 3. student shows cautious criticism in the reception of information, particularly available in the mass media, 4. student is aware of the need for honest and reliable work, 5. student can assess the role of team research (cooperation of scientists representing various disciplines and various scientific centers in the world) in modern chemistry, 6. student evaluates the influence of discoveries in the field of chemistry, especially made in 1911-20 ?? on modern chemistry |
| Prerequisites | <p><u>Formal requirements:</u> no formal requirements</p> <p><u>Prerequisites:</u> basic knowledge about physical and chemical laws governing nature, basic information about the structure and transformation of elements and organic compounds, basic knowledge of the construction of basic chemical equipment</p> |
| Course contents | <p>Biography of Alfred Nobel, discovery of dynamite and dynamite production, testament of Alfred Nobel, principles of granting the Nobel Prize, Nobel library, Nobel museum, biography of selected Nobel Prize Laureates who made groundbreaking discoveries in the field of chemistry, influence of Nobel researchers on modern chemistry, role of team research (collaboration between scientists representing various disciplines and various scientific centers in the world), the role of discoveries in the first ten years of the Nobel Prize granting, the role of discoveries in 1911-20 ?? in the field of physical chemistry, chemical thermodynamics, chemical reactions, chemistry of chemical bonds and theoretical chemistry, structural chemistry, inorganic and nuclear chemistry, organic chemistry, organic synthesis, chemistry of natural products, analytical and separation chemistry, chemistry of polymers and colloids, biochemistry, chemical technology</p> |
| Recommended reading | <ul style="list-style-type: none"> • http://www.nobelprize.org/ • Prateeksha M. Tiwari „Nobel prize, winners of the world”, Diamond Pocket Books Pvt Ltd, 2014 • Erling Norrby „Nobel Prizes and Life Sciences”, World Scientific, 2010 |

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| | <ul style="list-style-type: none"> • Laylin K. James „Nobel Laureates in Chemistry, 1901-1992”, Chemical Heritage Foundation, 1993 • Burton Feldman “The Nobel Prize: A History of Genius, Controversy, and Prestige”, Arcade Publishing, 2001 • Baruch A. Shaley „100 Years of Nobel Prizes” Atlantic Publishers & Dist, 2003 |
| Teaching methods | Lecture with multimedia presentation |
| Assessment methods | Determining the final grade based on the presentation and attendance |
| Language of instruction | Polish |