TURKEY HIGHER EDUCATION QUALIFICATIONS FRAMEWORK Natural Sciences Core Field Qualifications (Academically Oriented) Level 6 (UNDERGRADUATE Education) - EQF-LLL: 6 - QF-EHEA: 1															
CHEMISTRY		**Program Learning Outcomes**													
		PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**	**PO 7**	**PO 8**	**PO 9**	**PO 10**	**PO 11**	**PO 12**	**PO 13**	**PO 14**
INFORMATION	1-Possesses advanced theoretical and practical knowledge, emphasizing a scientific approach supported by textbooks, practical tools, and other resources containing up-to-date information in their field.	3	2	2	2	2	3	1	2	1	2	3	3	1	1
SKILLS (Cognitive-Applied)	1-Adapts and transfers the knowledge gained in their field to secondary education.	3	2	1	3	1	2	2	2	1	1	3	2	2	2
	2-Utilizes advanced theoretical and practical knowledge acquired in their field.	3	2	3	3	3	3	1	3	1	1	2	2	2	2
	3-Updates this knowledge according to current conditions.	2	2	2	2	2	3	3	2	1	2	3	3	2	2
	4-Using advanced knowledge and skills acquired in their field, they interpret and evaluate data, identify and analyze problems in parallel with current technological developments, and develop solutions based on research and evidence.	3	2	3	3	3	3	2	3	2	2	3	3	2	2
	5-They possess the ability to conceptualize events and phenomena related to their field; they examine them using scientific methods and techniques.	3	2	3	2	3	3	1	3	1	1	2	2	2	1
	6-They design and conduct experiments to investigate problems, collect data, analyze and interpret the results.	3	2	3	3	3	3	3	3	2	1	2	2	3	3

COMPETENCIES (Ability to work independently and take responsibility)	1-Independently conducts advanced research in their field.	**3**	**2**	**3**	**3**	**3**	**3**	**2**	**3**	**3**	**2**	**2**	**3**	**3**	**3**
	2-Takes responsibility, both individually and as a team member, for solving complex and unforeseen problems encountered in applications related to their field.	**2**	**3**	**3**	**3**	**2**	**2**	**1**	**2**	**3**	**1**	**2**	**2**	**3**	**3**
	3-Plans and manages activities aimed at the development of those working under their responsibility within the framework of a project.	**1**	**2**	**2**	**3**	**2**	**1**	**2**	**1**	**3**	**1**	**3**	**3**	**3**	**2**
	4-Plays a role in the decision-making process when dealing with problems related to different disciplinary fields.	**1**	**3**	**3**	**3**	**2**	**1**	**1**	**1**	**3**	**2**	**2**	**2**	**3**	**2**
	5-Uses time effectively in the process of drawing conclusions with their analytical thinking ability.	**2**	**1**	**3**	**3**	**2**	**2**	**1**	**3**	**2**	**1**	**2**	**2**	**2**	**2**
COMPETENCIES (Responsibility for Learning)	1-They critically evaluate the advanced knowledge and skills they have acquired in their field.	**3**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**3**	**3**	**2**	**1**
	2-They identify their learning needs and direct their learning.	**2**	**2**	**1**	**2**	**1**	**2**	**2**	**1**	**1**	**2**	**3**	**3**	**2**	**1**
	3-They develop a positive attitude towards lifelong learning.	**1**	**2**	**1**	**1**	**1**	**2**	**2**	**1**	**1**	**2**	**3**	**3**	**2**	**1**
	4-They are aware of the necessity of lifelong learning and continuously improve their professional knowledge and skills.	**2**	**2**	**2**	**2**	**2**	**3**	**2**	**2**	**1**	**2**	**3**	**3**	**2**	**2**

COMPETENCIES (Communication and Social Skills)	1-Informs relevant individuals and institutions on issues related to their field; expresses their thoughts and proposed solutions to problems in written and oral form.	**2**	**2**	**3**	**2**	**2**	**1**	**3**	**2**	**2**	**2**	**3**	**1**	**3**	**2**
	2-Shares their thoughts and proposed solutions to problems related to their field with experts and non-experts, supporting them with quantitative and qualitative data.	**2**	**2**	**3**	**2**	**2**	**2**	**3**	**3**	**2**	**2**	**3**	**1**	**3**	**2**
	3-Organizes and implements projects and activities for their social environment with a sense of social responsibility.	**1**	**3**	**2**	**3**	**2**	**1**	**2**	**1**	**3**	**1**	**3**	**2**	**3**	**3**
	4-Monitors information in their field and communicates with colleagues using at least a B1 General Level of the European Language Portfolio in a foreign language.	**1**	**3**	**3**	**3**	**2**	**1**	**2**	**1**	**3**	**1**	**3**	**2**	**3**	**3**
	5-Uses information and communication technologies, including computer software, at least at the Advanced Level of the European Computer Driving Licence, as required by their field.	**2**	**1**	**2**	**2**	**2**	**2**	**3**	**3**	**2**	**1**	**3**	**2**	**1**	**1**
	6-Utilizes their knowledge of human health and environmental awareness related to their field for the benefit of society.	**2**	**3**	**2**	**3**	**3**	**2**	**1**	**2**	**2**	**2**	**3**	**2**	**3**	**3**
COMPETENCIES (Field-Specific Competencies)	1-Acts in accordance with social, scientific, cultural, and ethical values in the stages of data collection, interpretation, application, and dissemination of results related to their field.	**2**	**2**	**3**	**3**	**2**	**2**	**1**	**3**	**2**	**1**	**3**	**2**	**3**	**3**
	2-They possess sufficient awareness of the universality of social rights, social justice, adherence to and participation in quality management and processes (instead of a quality culture), the protection of cultural values, environmental protection, and occupational health and safety.	**1**	**3**	**3**	**2**	**2**	**1**	**1**	**1**	**2**	**2**	**1**	**2**	**3**	**3**
1-Low, 2-Medium, 3-High															