

RECAPHE IO1 & IO2

Cluster	Competences Dimensions: (K) Knowledge (S) Skill (B) Behaviour	Relevance per target group 0=Irrelevant 1=Slightly Relevant 2=Relevant 3=Very Relevant					Learning Outcomes Levels: Basic Advanced
		Students/ Learners	Educational and Research Professionals		Institutional Academic Leaders	Policy Makers	
			Academic Staff, Researchers and Mentors	Administrative and Supporting Staff			
RESEARCH DESIGN FOR INNOVATION	(K) Understand the applicability of research methods, including their limitation (S) Acquire and foster knowledge and practical experience in applied research methods (including terminology and problem-solving techniques)	3	3	1	1	0	(K) Recognise and identify research methods, terminology and problem-solving techniques (Basic) (S) Devise imaginative and innovative solutions to research problems (Advanced) (S) Apply an understanding of the characteristics of quantitative and qualitative research methods in research design and practise (Advanced) (S) Plan the overall process of designing a research study from its inception to its reporting stage (Advanced) (S) Implement adequate research methods and techniques according to the nature of each research project (Advanced)
	(S) Communicate new and complex ideas to diverse stakeholders	1	3	1	3	3	(K) Understand communication theories applied to research (Basic) (S) Select and apply adequate communication strategies according to context and stakeholders (Advanced) (S) Formulate and disseminate complex ideas in more broadly understandable terms (Advanced)
	(B) Respect and comply with ethical and academic standards	3	3	3	3	3	(K) Describe and recognise ethical and academic standards in research environment (Basic) (S) Implement ethical and academic standards in a research environment (Advanced) (S) Apply different theoretical approaches relevant to Researchers' behaviour in the context of ethical dilemmas (Advanced)
	(B) Build and continuously develop a researcher identity	3	3	0	0	0	(S) Demonstrate the different stages of a researcher identity (Advanced) (B) Develop an appropriate research identity (Advanced)
	(S) Anticipate future research problems and to develop appropriate innovative Research based solutions	2	3	0	3	3	(K) Understand forward thinking and sustainability by assessing future consequences of research output (Basic) (S) Implement innovative research solutions to the existing research problems. (Advanced) (S) Create methodologies to identify future problems well in advance to have time to adapt your research to solve these problems that will arise in a short or medium term (Advanced)
	(S) Incorporate societal needs in the design	2	3	1	3	3	(S) Identify societal needs and incorporate them into research design. (Basic) (S) Adapt research design to the societal needs and practical demands. (Advanced)
RESEARCH MANAGEMENT	(S) Foster a collaborative communication with the various Institutional Stakeholders (S) Communicate research messages to a broader audience	3	3	3	3	3	(K) Recognise the importance of effective Communication in Research (Basic) (S) Demonstrate knowledge and skills of effective communication in concrete dialogues with various stakeholders in research projects (Advanced)
	(S) Define clear objectives, with the emphasis on identification of local needs	2	3	0	3	3	(K) Identify local needs of applied research in accordance with stakeholder input (Basic) (S) Define research objectives in a feasible and measurable way (e.g. using SMART methodology) (Advanced)
	(S) Monitor processes and activities (B) Build a strong quality mindset during the various stages of research (K) Understand the fundamentals of project management (K) Understand risk management strategies (S) Identify the nature and types of risk found in the research environment. (S) Apply risk management strategies (S) Identify and manage resources for a research project (e.g. time, equipment, materials, finances, human resources etc.) (B) Develop a risk-based thinking mindset	3	3	0	2	2	(K) Recognise quality management tools applicable to research (Basic) (S) Implement quality management in concrete research projects (Advanced)
	(K) Understand the fundamentals of project management (K) Understand risk management strategies (S) Identify the nature and types of risk found in the research environment. (S) Apply risk management strategies (S) Identify and manage resources for a research project (e.g. time, equipment, materials, finances, human resources etc.) (B) Develop a risk-based thinking mindset	2	3	1	3	3	(K) Understand project management and risk management methodology and application (Basic) (K) Identify relevant risks and mitigation measures in project development, application and exploitation of results (Advanced) (S) Perform research project with consciousness of different aspects, such as time, equipment, materials, finances, human resources etc. (Advanced) (B) Develop and build risk-awareness mindset (Advanced)
	(S) Ensure transferability and sustainability of research results	2	3	1	3	3	(S) Design a clear plan of sustainable implementation of research results (Advanced) (S) Develop various strategies for transferability of applied research results (Advanced) (B) Develop and build a result oriented mindset (Advanced)
	(S) Network with stakeholders	3	3	2	3	3	(K) Recognise and gain understanding of stakeholders field demands (Basic) (S) Develop strong research-oriented strategic partnerships with local, national, regional and international stakeholders (Advanced) (S) Design common research strategies for the development of applied research projects. (Advanced)
EXTERNAL COOPERATION AND KNOWLEDGE TRANSFER	(S) Foster a collaborative community with external partners from the research community to ensure development of a research knowledge transfer ecosystem	2	3	1	3	3	(K) Recognise the importance of the development of a research knowledge transfer ecosystem within the research community (Basic) (S) Design and maintain a synergistic approach with external stakeholders (e.g. world of work, civil society, public administration etc.) (Advanced) (S) Develop the appropriate strategies and measures to foster collaborative partnerships with external stakeholders (Advanced)
	(S) Develop and implement innovative solutions to societal problems	2	3	1	3	3	(K) Recognise the importance of market variances for the dissemination of research results (Basic) (S) Implement innovation management methodology and application (Advanced)
	(K) Understand the business/industry and challenges they face	2	3	1	3	3	(K) Recognise and gain an understanding of stakeholders' field demands (Basic) (S) Identify and anticipate new trends and challenges in business/industry (Advanced) (S) Perform innovative business and exploitation activities in the research activities (Advanced)
	(K) Understand compliance and intellectual property regulations, including patents/registering procedures and open licencing (S) Follow and implement compliance and intellectual property regulations including patents/registering procedures and open licencing	2	3	2	3	3	(K) Understand compliance and intellectual property regulations including patent/registering procedures and open licencing (Basic) (S) Implement compliance and intellectual property regulations including patent/registering procedures and open licencing in appropriate research projects (Advanced)
	(S) Foster a collaborative research approach to ensure stakeholder engagements are considered in a research collaborative community	1	3	0	3	3	(S) Search and identify the most appropriate regional stakeholder companies for research-based cooperation (Advanced) (S) Implement a sustainable stakeholder-oriented project collaboration selecting and applying appropriate strategies and measures for external cooperation (Advanced)
	(S) Build respectful and appreciative cooperation routines with other institutions and non-university research institutions.	1	3	0	3	3	(K) Understand cultural differences in cooperation activities (Basic) (S) Build systematic communication with regional stakeholders based on team building and leadership to develop adequate learning environments for work-based learning and research (Advanced) (S) Evaluate cooperation experiences and prepare report for future development (Advanced) (B) Develop and build continuous interest in the most innovative stakeholder companies for selection of the best ones for internship, work placements, dual education and research projects (Advanced)
	(S) Promote, organize and manage research activities on work-based learning	1	3	1	3	0	(S) Demonstrate organisational and management skills for effective work-based learning and research (Advanced) (S) Promote integration of research theory (quantitative and qualitative methodologies) and practice by motivating reflection on it in both contexts (Advanced)
	(K) Understand the dynamics of team building and teamwork	3	3	2	3	3	(K) List and describe the stages of team formation and development (Basic) (B) Recognise the importance of team effectiveness in the field of Research (Advanced)

TEAMWORK	(S) Contribute to team performance by using one's own strengths, potentials and mitigating any weaknesses and biases identified	3	3	2	3	3	(K) Understand common biases (Basic) (K) Understand how team norms influence team behaviours in a research environment (Basic) (B) Develop and build self-awareness of one's strengths and weaknesses, potentials, limits and biases in the context of a team environment (Advanced)
	(K) Understand the importance of communication in a Research Environment (S) Adapt to different contexts and communicate criticism in a constructive way (B) Appreciate the value of constructive criticism from others	3	3	2	3	3	(K) Recognise the main aspects of research communication (Basic) (S) Apply constructive feedback techniques (Advanced) (B) Build a constructive peer feedback culture (Advanced)
	(B) Pursue objectives and activities as a team	3	3	2	3	3	(S) Cascade research objectives into research activities that can be distributed among team members (Advanced)
	(B) Develop and build an appreciation of diversity. (S) Foster an inclusive research environment.	3	3	2	3	3	(S) Integrate inclusive considerations into the whole planning, implementation and dissemination of a research project (Advanced) (B) Understand the importance of diversity and inclusion in a team environment (Advanced)
	(S) Work collaboratively (B) Develop and build appreciation of collaborative work	3	3	2	3	3	(S) Identify useful partnerships in a research environment (Advanced) (S) Identify and implement methods and tools to enhance team work (Advanced) (B) Recognise the importance of collaborative work in a research environment (Advanced)
RESEARCH BASED TEACHING	(K) Understand methods of conflict resolution in research (S) Resolve conflicts in an unbiased way	3	3	2	3	3	(S) Apply conflict management strategies (Advanced) (B) Recognise the importance of conflict resolution in a research environment (Advanced)
	(K) Understand general and discipline-related higher education pedagogy (S) Assess students' prior knowledge and skills and adapt the course accordingly	2	3	0	2	0	(S) Identify students' prior knowledge concerning research and review course contents accordingly (Advanced) (B) Reflect on one's pedagogical identity and viewpoint in research (Advanced)
	(K) Understand the importance of time management in teaching	2	3	0	0	0	(K) Recognise the importance for time management in a research environment (Basic) (S) Implement time management tools and patterns (Advanced)
	(S) Create a fair, respectful, inclusive learning environment (B) Develop and build an understanding of fair, respectful, self-reflective, inclusive and professional teaching habitus	3	3	0	0	0	(S) Develop an inclusive teaching methodology (Advanced) (B) Develop an understanding of the importance of an inclusive research teaching environment (Advanced)
	(S) Promote individual knowledge construction (S) Promote explorative and research-based learning	3	3	0	0	0	(S) Develop and build student-centred research approach (Advanced) (B) Recognise the importance of having a student-centred self-learning approach in an environment (Advanced) (S) Design, assess and develop appropriate research tasks for students (Advanced) (B) Recognise the importance of research-based learning (Advanced)
LEADERSHIP, SCIENTIFIC GUIDANCE AND SUPERVISION	(S) Supervise and guide students and members of the research team scientifically as well as personally in their capacity for conducting research initiatives	0	3	0	3	0	(K) Characterize supervision, coaching, tutoring and mentorship methods and techniques (Basic) (S) Apply supervision, coaching, tutoring and mentorship methods and techniques (Advanced) (B) Recognise the importance of supervision, coaching, tutoring and mentorship methods and techniques (Advanced)
	(S) Foster a supportive and engaging research atmosphere for students and members of the research team to develop and enhance their research potential	1	3	0	3	0	(K) Describe team building theory and collaborative tools (Basic) (S) Apply team building methods and develop a collaborative approach within the research team (Advanced) (B) Recognise the importance of team building and collaborative tools (Advanced)
	(S) Lead the research team successfully throughout the entire research process	0	3	0	3	0	(K) Describe the importance of effective leadership in your research project (Basic) (S) Motivate and guide the research team during the entire research project (Advanced) (S) Anticipate and identify critical situations in the research process and address them (Advanced)
	(S) Motivate students and members of the research team, provide feedback and advise concerning their professional development pathway	0	3	0	3	0	(K) Describe potential career opportunities to enhance personal development (Basic) (S) Anticipate and identify career guidance opportunities in order to promote employability within Research (Advanced)
	(K) Understand national, european and international scientific research funding programmes (S) Prepare grant applications (Basic)	3	3	2	2	2	(S) Identify national, european and international institutions responsible for research funding programmes (Basic) (K) Characterize research funding programmes and their rules (Basic) (S) Select adequate funding programmes to each project (Advanced)