

## Adam Mickiewicz University in Poznań

## **Doctoral School of Exact Sciences AMU**

## Academic didactics

Course leader prof. UAM dr hab. Eliza Rybska

Scientific lectures, workshops

Field of science			
Teaching method	Lectures with interactive methods applied		
Language	English		
Numbers of hours	15		
Aims of the course	- characterization of cognition and its links to learning - understanding the connection between the mind and the environment in educational contexts (and how does brain learn) - finding mutual connections between teaching and learning - finding and answer to a question "what type of teacher I would like to be?" - finding answer to a question "what is a goal of science education?" - explaining the specifics of adult learning in the context of university education - describing the differences between types of objectives in didactical situation and formulating objective to a given educational situation - designing meaningful educational activity - estimating prior knowledge and interpreting the role of prior knowledge in conceptual change - understanding and explaining different teaching approaches and their consequences - presenting a strategy engaging to individual or group work of students before classes - presenting selected teaching methods (eg. academic lecture, hands-on, drawing)		
Course contents	- cognition, cognitive system and learning - Teaching and learning – main characteristics of both processes - assessment and evaluation – idea, methods types - core ideas of science education - goals, methods, forms dedicated to science education - key steps in educational design - role of educational activity, prior knowledge, scaffolding -pedagogical approaches in academic education in the context of the consequences of teaching activities - key principles of andragogy - characteristics of teaching competencies necessary for the work of an academic teacher - selected forms and methods of conducting academic classes		
Prerequisites and co-requisites	Advanced knowledge of the subject to be taught by PhD students		

Learning outcomes			
On completion of the course PhD candidates will be able to:		Assessment mode	
E_W07, E_W08, E_K01, E_K02		Participation in discussion, reflective written work, preparing examples of evaluation for own teaching, quizz	
E_W07		reflective written work	
E_U08, E_K03		Participation in discussion, reflective written work, quizz	
Literature	- Stanislas Dehaene How We Learn: Why Brains Learn Better Than Any Machine for now, 2020, Viking - Fry, Heather, Steve Ketteridge, and Stephanie Marshall. A handbook for teaching and learning in higher education: Enhancing academic practice. Routledge, 2008 Hattie, John. Visible learning for teachers: Maximizing impact on learning. Routledge, 2012 Wells, Gordon, and Guy Claxton, eds. Learning for life in the 21st century: Sociocultural perspectives on the future of education. John Wiley & Sons, 2008 Claxton, G. (2017). The Learning Power Approach: Teaching Learners to Teach Themselves. Corwin Press Pritchard A, 2009. Ways of learning. Learning theories and learning styles in the classroom. Routledge - Biggs J., Tang C. 2007. Teaching for Quality Learning at University. What the Student Does. Society for Research Into Higher Education & Open University Press. Printed in Poland OZ Graf. S.A Silver H. F., Perini M. J. 2010. The interactive lecture: how to engage students, build memory, and deepen comprehension. Alexandria, VA: ASCD		
Additional information			