	Adam Mickiewicz University in Poznań
	Doctoral School of Exact Sciences AMU
	Uniform distribution mod 1 and normal numbers
	William Mance
	Scientific lectures, workshops

Field of science	Mathematics
Teaching method	Lectures
Language	English
Numbers of hours	15
Aims of the course	To familiarize students with tools from the theory of uniformly distributed sequences and ergodic theory.
Course contents	1. Theory of uniform distribution mod 1 2. Normal numbers 3. Numeration systems (b-ary expansions, beta-expansions, continued fraction expansion, Cantor series expansions, etc.) 4. Basic ergodic theory 5. Topics of current research interest relating to the above
Prerequisites and co-requisites	A course on measure theory.

Learning outcomes	
On completion of the course PhD candidates will be able to:	**Assessment mode**
Have a basic understanding of research questions involving uniformly distributed sequences and normal numbers in different numeration systems.	E_W01 E_W02 E_U01 E_U02 E_U05

Literature	1. Uniform Distribution of Sequences by L. Kuipers, H. Niederreiter 2. Distribution Modulo One and Diophantine Approximation by Yann Bugeaud 3. Ergodic Theory of Numbers by K. Dajani and C. Kraaikamp
Additional information	