

# BSCS

## Data of courses form

**Lecturer's name:** Adam Miklósi

**Position:** professor

**Organisation:** Dept. of Ethology, Eötvös University

**Address:** Pázmány P. s 1c, BUDAPEST, Hungary 1117

**e-mail address:** amiklosi62@gmail.com

**Homepage:** <http://etologia.elte.hu/>

**Title of the course:** Cognitive Ethology

**Detailed syllabus of the course, with topics addressed in each 90 minutes lecture (less than 2 pages):**

DAY 1. Introduction to cognitive ethology

Darwinian evolution, Epigenesis  
Ethology, innateness, behavioural models  
Tinbergen's 4 questions, Cognitive ethology  
Comparative cognition

DAY 2. Ecological and Social Cognition (Problem solving)

Approaches to learning and cognition, measuring intelligence  
Forms of associative learning, Operant conditioning  
Spatial cognition and orientation  
Cognitive maps, causal understanding, tool use  
Social cognition, Intentionality, Attention

DAY 3. Ethology of communication

Definition, ethological approach  
Levels of communication  
Adaptation and communication, evolution of communicative signals  
Mating signals, bird song  
Alarm signals, functional referentiality  
Manipulation of information, communication networks  
Language training with animals, evolution of language

DAY 4. Social learning, traditions, teaching

Definitions and categories  
Adaptivity and social learning  
Laboratory models of social learning, mechanisms in social learning  
Neuronal mechanisms, mirror neurons  
Evolutionary aspects, teaching,  
Traditions and culture

DAY 5. Consultation, written exam

**Background information on the web (optional):****Short CV (less than half page):****Personal information:**

Name: MIKLÓSI, Ádám  
Place and date of Birth: Budapest, 25 September, 1962  
Nationality: Hungarian  
Profession: Biologist

**Positions:**

1981-1986 Eötvös L. University (Budapest, Hungary)  
MSc degree in Biology  
1986-1989 Research scholarship of the Hungarian Academy of Sciences,  
work at the Dep. of Ethology  
1989-1996 Research assistant at the Department of Ethology  
1996-2000 Postdoctoral Research Fellow at the Dept. of Ethology  
2000- Associate professor  
2006- Professor and Head of Department

**Education:**

M.Sc. at Eötvös University of Budapest (1983)  
*Thesis:* Quantitative analysis of predator avoidance in the paradise fish  
(*Macropodus opercularis*).  
Candidate of Biology (PhD), Hungarian Academy of Sciences (1995)  
*Thesis:* Analysis of learning in the paradise fish  
Doctor of Science (DSc), Hungarian Academy of Sciences (2005)  
*Thesis:* Representational models of the living environment:  
An ethological approach

**Research grants:**

1991-1994 research grant "For the study of the use of ethological and psychological methods in behavioural genetics" (principal investigator)  
1994-1998 The dog as a model for social evolution (participant)  
1999-2002 Investigation of social intelligence in dogs, (participant)  
2003-2006 The dog as a model for human personality  
2005-2008 EU FP-6-NEST: Evolution of referential communication (participant)  
2005-2008 Social learning in dogs (principal investigator)  
2008-2012 EU FP 7 Living with Interactive Companions  
2012-2016 Comparative Ethology Research Group

**Important publications (5-10):**

Miklósi, Á. 1999. The ethological analysis of imitation. *Biological Review*, 74, 347-374.  
Pongrácz, P., Miklósi, Á., Kubinyi, E., Gurobi, K., Topál, J., Csányi, V. 2001. Social learning in dogs I. The effect of a human demonstrator on the performance of dogs (*Canis familiaris*) in a detour task. *Animal Behaviour*, 62, 1109-1117.  
Miklósi, A, Kubinyi E, Topál, J, Gácsi, M., Virányi, Zs., Csányi, V. 2003. A simple reason for a big difference: wolves do not look back at humans but dogs do. *Current Biology*, 13, 763-766.  
Topál, J., Miklósi, Á., Gácsi, M., Dóka, A., Pongrácz, P., Kubinyi, E., Virányi Zs., Csányi, V. 2009. The dog as a model for understanding human social behavior. *Advances in the Study of Animal Behaviour*, 39: 71-116.  
Byrne, R.W., Barnard, P.J., Davidson, I., Janik, V.M., McGrew, M.C., Miklósi, Á., Wiessner, P. 2004. Understanding culture across species. *Trends in Cognitive Sciences*, 8, 341-346.  
Miklósi, Á 2007. Dog behaviour, evolution, cognition. Oxford University Press.  
Topál, J., Gergely, Gy., Erdőhegyi, Á., Csibra, G., Miklósi, Á. 2009. Differential sensitivity to human communication in dogs, wolves, and human infants. *Science*, 325, 1269-1272.

Faragó, T., Pongrácz, P., Miklósi, Á., Huber, L., ; Virányi, Zs., Range, F. (2010) Dogs' expectation about signalers' body size by virtue of their growls. *PLOS ONE* 5 (12): e15175.

**Anything else (course requirements, readings list, etc):**

The course material will be provided in form of Power Point print outs.

Topics are based on chapters in: Shettleworth, S. 2010. Cognition, Evolution and Behaviour (chapters will be provided)

Suggested further reading:

Byrne R. 1985. The thinking ape

Davey, Ecological learning theory

Miklósi, Á 2014. Dog behaviour, evolution, cognition. Oxford University Press.