



SZENT ISTVÁN
EGYETEM



A. D. 1 8 5 3

KERTÉSZETTUDOMÁNYI KAR, BUDAPEST

**A Mezőgazdasági biotechnológus mesterképzési szak
angol nyelvű képzése 2017/18. tanévtől felmenő
rendszerben hatályos mintatanterve**

Hatályba lépés: 2017. augusztus 1.

Sample curriculum for the MSc in Agricultural Biotechnology program

Course						
Code	Title	Instructor	Contact hours / week	Field trip (days)	Credits	Requirement
1st (fall) semester (Grade 1)						
1MB42NAK02M	General microbiology	Anna Maráz	1+2		3	exam
3GN18NAK08M	Classical genetics	Júlia Halász	1+2		4	exam
3GN18NAK09M	Molecular genetics	Attila Hegedűs	1+3		4	exam
3MN24NAK06M	Plant physiology and molecular plant biology ¹	István Papp	1+2		3	exam
3NT20NAK15M	Cell biology	Zsolt Erős-Honti	1+2		3	exam
3MN24NAK14M	Organic chemistry and biochemistry	Anita Szegő	1+3		4	exam
3DD02NAK10M	Propagation biology of plants ²	Károly Hrotkó	2+1		3	exam
3DD02NAK52M	Tissue culturing and micropropagation	Andrea Tillyné Mándy	1+2		4	exam
Compulsory ('A') courses altogether:			9+17		28	8E
Optional ('C') course:			2 hours		2	K/TM
ALTOGETHER:			28		30	

2nd (spring) semester (Grade 1)						
3MN24NAK36M	Physiology of metabolism, pathophysiology and stress biology	István Papp	2+2		4	exam
3MN24NAK16M	Basic methods in genetic engineering	István Papp	1+2		3	exam
3MN24NAK07M	Safety, legal and ethical questions concerning biotechnology	Noémi Lukács	2+0		3	exam
3ME13NAK16M	Biologically active substances of horticultural crops ²	Éva Zámboriné Németh	2+0		3	exam
3GN18NAK10M	Biotechnological methods in plant breeding (practical)	Attila Hegedűs	1+4 (block)		6	exam
3MN24NAK17M	Gene technology: transgenic animals	Zsuzsanna Bősze	1+2 (block)		3	exam
3GN18NAK11M	Molecular markers	Zsuzsanna Benyóné György	1+2		4	exam
3MN24NAK18M	Genetic engineering of physiological processes in plants	István Papp	1+4 (block)		6	exam
ALTOGETHER:			11+16		32	8E

¹ The course is held together with the Horticultural Engineering MSc program.

Course						
Code	Title	Instructor	Contact hours / week	Field trip (days)	Credits	Requirement

3rd (fall) semester (Grade 2)						
3MI09NAK34M	Bioinformatics	András Ittész	1+4		5	exam
3GN18NAK12M	Achievements and targets in breeding of horticultural plants	Júlia Halász	1+2		4	exam
3GN18NAK13M	Population- and evolution genetics	Attila Hegedűs	1+1		3	exam
3ME13NAK08M	Production of ecosystems and forms of their regulation ²	Jenő Bernáth	2+1		3	exam
3MN24NAK19M	Diploma thesis I.	Attila Hegedűs	0+8		10	term mark
	Internship	Program instructor	4 weeks		5	term mark
ALTOGETHER:			5+16		30	4E2TM

4th (spring) semester (Grade 2)						
1MB42NAK03M	Food safety	Gabriella Kiskó	1+1		3	exam
3MM11NAK88M	Marketing of biotechnology products and innovative start-ups in competing environment	Géza Székely	2+1		3	exam
3GN18NAK31M	Functional and structural genomics	Attila Hegedűs	1+3		4	exam
3GN18NAK32M	Plant biotechnology and RNA techniques in global agriculture	Ervin Balázs	2+2		4	exam
3MN24NAK21M	Diploma thesis II.	Attila Hegedűs	0+4		10	term mark
Compulsory ('A') courses altogether:			6+11		24	4E1TM
Optional ('C') courses:			4 hours		4	K/TM
ALTOGETHER:			21		28	

¹ The course is held together with the Horticultural Engineering MSc program.