University: P. J. Šafá	arik University in Košice	
Faculty: Faculty of S	Science	
Course ID: ÚBEV/ ACM/12	Course name: Analytical Cytometry	
Course type, scope a Course type: Lectur Recommended cour Per week: 1 / 2 Per Course method: pre	re / Practice rse-load (hours): study period: 14 / 28	
Number of credits: 4	4	
Recommended seme	ester/trimester of the course:	
Course level: II., III.		
D ::/:		

Prerequisities:

Conditions for course completion:

Learning outcomes:

The goal of the course is to teach the students fundamental theoretical and practical aspects of analytical cytometry. The course covers multiple areas of methods in microscopy with special focus on flurescence and its application in confocal microscopy, morphometric measurements and their applications in cytology, determination of vital parameters and live cell imaging, basic methods for sample preparation etc.

Brief outline of the course:

Fundamentals of fluorescent methods, principles of fluorescence and various fluorescent methods (FRET, FLIM, FLIM-FRET, FRAP etc.), utilization of flurescent and phusion proteins. Principles of confocal microscopy (spinning disc CM, laser scanning CM), principles of colocalisation studies, software image analysis. Analyses on living cells – principles, hardware requirements, methods for vital parameters analyses, imaging methods with regard to lipids, cytoskeleton dynamics or cell division. Fluorescent dyes and their applications in analytical cytometry – nucleic acid, lipid, proteins, cytosceleton stainings, visualization of cell organelles, vital stainings, membrane transport, reactive oxygen and nitrogen species (ROS, NOS), membrane potential, pH etc.

Recommended literature:

1. R.D. Goldman a kol.: Live Cell Imaging – A Laboratory Manual, Cold Spring Harbour Laboratory Press, 2010

- 2. J.B. Pawley a kol.: Handbook of Biological Confocal Microscopy, Springer, 2006
- 3. D. Anselmetti a kol.: Single Cell Analysis, Wiley-Blackwell, 2009
- 4. A. Hibbs a kol.: Confocal Microscopy for Biologists, Kluwer Academic/Plenum Publishers, 2004

Course language:

Notes:

Course ass Total numb	essment ber of assesse	d students: 1	4				
А	В	С	D	Е	FX	Ν	Р
7.14	7.14 0.0 0.0 0.0 0.0 0.0 0.0 92.86						
Provides: d Jendželovsk		aromír Mikeš	, PhD., RNI	Dr. Ján Koval	ľ, PhD., RNE	Dr. Rastislav	
Date of last	t modificatio	on: 13.02.201	4				
Approved:	prof. RNDr.	Peter Fedore	očko, CSc.				

East-14 F		Conversity i	n Košice				
raculty: Fa	culty of Sci	ence					
Course ID: AEM/06	ÚBEV/	Course name:	Applied Em	lbryology			
Course typ Recommen	be: Lecture nded cours 2 / 1 Per st	e-load (hours udy period: 2	s):				
Number of	credits: 4						
Recommen	ded semest	er/trimester	of the cours	e:			
Course leve	el: III.						
Prerequisiti	ies:						
Conditions None. Test.	for course	completion:					
Learning of Complex u experimenta	nderstandir	ng of current	assisted re	production t	echnologies	and metho	ds used in
	the latest te	urse: echniques in cal medicine a	and science (e	e.g., in vitro f	ertilization, c	cloning, prein	
Selected ch	ransgenesis apters from ics) will en	s, gene knock n allied basic hance comple	sciences (e	embryology,	-		elopmental
Selected ch biology, eth experimenta Recomment	ransgenesis apters from ics) will en al pathology ded literat	n allied basic hance comple	e sciences (e ex understand	embryology,	-		elopmental
Selected ch biology, eth experimenta Recomment	ransgenesis apters from ics) will en al pathology ded literatury the teache	n allied basic hance comple /. 	e sciences (e ex understand	embryology,	-		elopmental
Selected ch biology, eth experimenta Recommen Provided by	ransgenesis apters from ics) will en al pathology ded literatury the teache	n allied basic hance comple /. 	e sciences (e ex understand	embryology,	-		elopmental
Selected ch biology, eth experimenta Provided by Course lang Notes: Course asse	ransgenesis apters from ics) will en al pathology ded literatu / the teache guage: essment	n allied basic hance comple /. 	e sciences (e ex understand om.	embryology,	-		elopmental
Selected ch biology, eth experimenta Provided by Course lang Notes: Course asse	ransgenesis apters from ics) will en al pathology ded literatu / the teache guage: essment	n allied basic hance comple y. are: r in a classroc	e sciences (e ex understand om.	embryology,	-		elopmental
Selected ch biology, eth experimenta Recommenta Provided by Course lang Notes: Course asse Total numb	ransgenesis apters from al pathology ded literatury the teacher guage: essment er of assess	n allied basic hance comple /. ire: r in a classroc ed students: 1	e sciences (e ex understand om. 28	embryology, ling of curre	nt trends in c		velopmental cyology and
Selected ch biology, eth experimenta Recommenta Provided by Course lang Notes: Course asse Total numb A 50.0	ransgenesis hapters from ics) will en al pathology ded literatur / the teacher guage: essment er of assess B 36.72	n allied basic hance comple /. ire: r in a classroo	e sciences (e ex understand om. 28 D 2.34	E	nt trends in c	linical embr	P
Selected ch biology, eth experimenta Recommend Provided by Course lang Notes: Course asse Total numb A 50.0 Provides: definition	ransgenesis apters from al pathology ded literatury the teacher guage: essment er of assess B 36.72 oc. MUDr.	n allied basic hance comple y. are: r in a classroo ed students: 1 C 3.91	e sciences (e ex understand om. 28 28 20 2.34 , PhD.	E	nt trends in c	linical embr	P

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚBEV/ PVS/04	Course name: Author's pa	tents, discoveries, software
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:	
Number of credits: 2	2	
Recommended seme	ster/trimester of the cours	e:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the c	course:	
Recommended litera	ature:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 1	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	ntion: 13.02.2014	
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.	

University: P. J. Šafá	rik University in Košice
Faculty: Faculty of S	cience
Course ID: ÚBEV/ CM/04	Course name: Citation in monograph
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:
Number of credits: 2	0
Recommended seme	ster/trimester of the course:
Course level: III.	
Prerequisities:	
Conditions for cours	e completion:
Learning outcomes:	
Brief outline of the c	ourse:
Recommended litera	iture:
Course language:	
Notes:	
Course assessment Total number of asse	ssed students: 0
Provides:	
Date of last modifica	tion: 13.02.2014
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚBEV/ CZC/04	Course name: Citation in s	scientific journal published abroad
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): y period:	
Number of credits: 1	0	
Recommended seme	ster/trimester of the cours	e:
Course level: III.		
Prerequisities:		
Conditions for cours	e completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended liters	iture:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 20	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	tion: 13.02.2014	
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.	

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	Science	
Course ID: ÚBEV/ CDC/04	Course name: Citation in residence	scientific journal published in the country of
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:	
Number of credits:	5	
Recommended seme	ester/trimester of the cours	se:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the o	course:	
Recommended liter	ature:	
Course language:		
Notes:		
Course assessment Total number of asse	essed students: 5	
	abs	n
	100.0	0.0
Provides:		
Date of last modific:	ation: 13.02.2014	
Approved: prof. RN	Dr. Peter Fedoročko, CSc.	

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚBEV/ SCI/04	Course name: Citation reg	sistered in Science Citation Index
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:	
Number of credits: 2	20	
Recommended seme	ster/trimester of the cours	e:
Course level: III.		
Prerequisities:		
Conditions for cours	e completion:	
Learning outcomes:		
Brief outline of the c	ourse:	
Recommended litera	iture:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 30	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	tion: 13.02.2014	
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.	

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	cience	
Course ID: ÚBEV/ DK/04	Course name: Conference	in the country of residence
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:	
Number of credits: 2	2	
Recommended seme	ster/trimester of the cours	e:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the c	course:	
Recommended litera	ature:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 79	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	ntion: 13.02.2014	
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.	

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	Science	
Course ID: ÚBEV/ SMPR/04	Course name: Co-worker schemes	of project supported by international grant
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pr	rse-load (hours): ly period:	
Number of credits:	15	
Recommended seme	ester/trimester of the cours	e:
Course level: III.		
Prerequisities:		
Conditions for cour	se completion:	
Learning outcomes:		
Brief outline of the o	course:	
Recommended liter	ature:	
Course language:		
Notes:		
Course assessment Total number of asse	essed students: 31	
	abs	n
	100.0	0.0
Provides:		
Date of last modific:	ation: 13.02.2014	
Approved: prof. RN	Dr. Peter Fedoročko, CSc.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ SDPR/04	Course name: Co-worker	of project supported by national grant schemes	
Course type, scope a Course type: Recommended cour Per week: Per stud Course method: pre	rse-load (hours): y period:		
Number of credits: 2			
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	e completion:		
Learning outcomes:			
Brief outline of the c	ourse:		
Recommended litera	iture:		
Course language:			
Notes:			
Course assessment Total number of asses	ssed students: 266		
	abs	n	
100.0 0.0			
Provides:			
Date of last modifica	tion: 13.02.2014		
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.		

Faculty: Faculty of Science	
Course ID: ÚBEV/ CK1/03Course name: Cytogenetics and Karyology	
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 2 Per study period: 14 / 28 Course method: present	
Number of credits: 4	
Recommended semester/trimester of the course:	
Course level: II., III.	
Prerequisities:	
written tests, protocols, oral examination Learning outcomes:	
To gain knowledge and experience in genetic processes at the cell level using the newest scient findings of cytogenetics and moleculoar cytology. To get acquainted in detail with the reacomming from human genome mapping.	
Brief outline of the course: Organisation of eukaryotic genome. Nuclear skeleton. Nucleolus, nucleolar skeleton. Chrom structure and changes of chromatin. Levels of DNA organisation in cell nucleus. Chromosof Polythene chromosomes. Cell cycle. Genetic regulation of a cell cycle. Genetic regulatio cell differentiation. Apoptosis. Telomeres and function of telomerase. Molecular cytology. B characteristics of the Human genom project - what we can learn from it?	mes. n of
Recommended literature: Russel, J.P.: Genetics, Third Edition, Harper Collins Publisher, New York 1992 Periodicals Internet sources	
Course language:	
Notes:	
Course assessment Total number of assessed students: 866	
A B C D E FX N P	
24.94 15.13 15.59 14.43 16.28 12.47 0.0 1.1	5
Provides: prof. RNDr. Eva Čellárová, DrSc., RNDr. Katarína Bruňáková, PhD.	
Date of last modification: 13.02.2014	

Approved: prof. RNDr. Peter Fedoročko, CSc.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ ODZP/04	Course name: Defence of	Doctoral Thesis	
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:		
Number of credits:)		
Recommended seme	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 37		
	Ν	Р	
	0.0	100.0	
Provides:			
Date of last modific:	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DZS/04	Course name: Doctoral e	exam	
Course type, scope a Course type: Recommended cou Per week: Per stuc Course method: pre	rse-load (hours): ly period:		
Number of credits: ()		
Recommended seme	ester/trimester of the cour	rse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 77		
	Ν	Р	
	1.3	98.7	
Provides:			
Date of last modifica	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DZP1a/04	Course name: Doctora	l Thesis	
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:		
Number of credits:	-		
Recommended seme	ster/trimester of the co	urse:	
Course level: III.			
Prerequisities:	,		
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	ature:		
Course language:			
Notes:	· · · · · · · · · · · · · · · · · · ·		
Course assessment Total number of asse	ssed students: 33		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modifica	ntion: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSo	2.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DZP1b/04	Course name: Doctora	l Thesis	
Course type, scope a Course type: Recommended cou Per week: Per stuc Course method: pro	rse-load (hours): ly period:		
Number of credits:			
Recommended seme	ester/trimester of the co	urse:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 55		
	abs	n	
	100.0	0.0	
Provides:		· · · · · · · · · · · · · · · · · · ·	
Date of last modifica	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc	2.	

University: P. J. Ša	afárik Universi	ty in Košice			
Faculty: Faculty of	f Science			-	
Course ID: CJP/ AJD1/07	Course na	me: English Laı	nguage for PhD S	Students 1	
Course type, scope Course type: Prac Recommended co Per week: 2 Per s Course method: 1	ctice ourse-load (ho study period:	ours):			
Number of credits	: 2				
Recommended ser	nester/trimes	ter of the cours	e: 1.		
Course level: III.					
Prerequisities:					
Conditions for cou	irse completio	on:			
Learning outcome	es:				
Brief outline of the	e course:				
Recommended lite	erature:				
Course language:					
Notes:					
Course assessmen Total number of as	-	s: 374			
N	Ne	Р	Pr	abs	neabs
0.0	0.0	75.4	0.0	24.6	0.0
Provides: PhDr. He	elena Petruňov	vá, CSc., Mgr. Z	uzana Kolaříkov	á, PhD.	
Date of last modifi	ication: 06.02	.2014			
Approved: prof. R	NDr. Peter Fee	doročko, CSc.			

University: P. J. Ša	afárik Univers	ity in Košice		I	
Faculty: Faculty of	f Science			-	
Course ID: CJP/ AJD2/07	Course na	me: English Lar	iguage for PhD S	Students 2	
Course type, scope Course type: Prac Recommended co Per week: 2 Per s Course method: 1	ctice ourse-load (h study period:	ours):			
Number of credits	: 3				
Recommended ser	nester/trimes	ster of the cours	e: 2.		
Course level: III.					
Prerequisities:					
Conditions for cou	ırse completi	on:			
Learning outcome	es:				
Brief outline of the	e course:			-	
Recommended lite	erature:				
Course language:					
Notes:					
Course assessmen Total number of as		ts: 375			
N	Ne	Р	Pr	abs	neabs
0.0	0.0	88.8	2.13	9.07	0.0
Provides: PhDr. He	elena Petruňo	vá, CSc., Mgr. Zu	ızana Kolaříková	i, PhD.	•
Date of last modifi	ication: 06.02	2.2014		c	
Approved: prof. R	NDr. Peter Fe	doročko, CSc.			

	1. J. Bala	rik University i	in Kosice				
Faculty: Fa	culty of S	cience					
Course ID: ÚBEV/ EMK/15Course name: Environmentálna mikrobiológia							
Course ty Recomme	pe: Lectur nded cour 2 / 2 Per	nd the method e / Practice rse-load (hour study period: sent	s):				
Number of	credits: 5						
Recommen	ded seme	ster/trimester	of the cours	e:			
Course leve	el: II., III.						
Prerequisit	ies:						
		e completion: als (at least 90	%), final oral	examination	L		
Learning o		oto o <i>n</i>	tion of the	•	his sul	1	
To provide of most free organisms.	students d quently oc	ata on participa curing microbi					
To provide of most free organisms. Brief outlin Evolution a	students d quently oc ne of the c and biodiv cors on mi	curing microbi	ial communit	ies and intera	nctions ofmi	eroorganism	s with other
To provide of most free organisms. Brief outlin Evolution a abiotic fact	students d quently oc ne of the c and biodiv cors on mi rganisms	curing microbi ourse: ersity of micro croorganisms,	ial communit	ies and intera	nctions ofmi	eroorganism	s with other
To provide of most free organisms. Brief outlin Evolution a abiotic fact and other o	students d quently oc ne of the c and biodiv cors on mi rganisms ded litera	curing microbi ourse: ersity of micro croorganisms,	ial communit	ies and intera	nctions ofmi	eroorganism	s with other
To provide of most free organisms. Brief outlin Evolution a abiotic fact and other o Recommen	students d quently oc ne of the c and biodiv cors on mi rganisms ded litera	curing microbi ourse: ersity of micro croorganisms,	ial communit	ies and intera	nctions ofmi	eroorganism	s with other
To provide of most free organisms. Brief outlin Evolution a abiotic fact and other o Recommen Course lang Notes: Course asso	students d quently oc ne of the c and biodiv cors on mi rganisms ded litera guage: essment	curing microbi ourse: ersity of micro croorganisms,	ial communit	ies and intera	nctions ofmi	eroorganism	s with other
To provide of most free organisms. Brief outlin Evolution a abiotic fact and other o Recommen Course lang Notes: Course asso	students d quently oc ne of the c and biodiv cors on mi rganisms ded litera guage: essment	curing microbi ourse: ersity of micro croorganisms, ture:	ial communit	ies and intera	nctions ofmi	eroorganism	s with other
To provide of most free organisms. Brief outlin Evolution a abiotic fact and other o Recommen Course lan Notes: Course asse Total numb	students d quently oc ne of the c and biodiv cors on mi rganisms ded litera guage: essment per of asses	curing microbi ourse: ersity of micro croorganisms, ture:	ial communit	ies and intera	nctions ofminents in environment	eroorganism	s with other
To provide of most free organisms. Brief outlin Evolution a abiotic fact and other o Recommen Course lang Notes: Course asso Total numb A 33.33	students d quently oc ne of the c and biodiv cors on mi rganisms ded litera guage: essment per of asses B 50.0	curing microbi ourse: ersity of micro croorganisms, ture: ssed students: 6	ial communit	ies and interanic interani	rections of mini- ms in environ nteractions b FX 0.0	onment, the i etween micr	s with other
To provide of most free organisms. Brief outlin Evolution a abiotic fact and other o Recommen Course lang Notes: Course asso Total numb A 33.33 Provides: d	students d quently oc ne of the c and biodiv cors on mi rganisms ded litera guage: essment per of asses B 50.0	curing microbi ourse: ersity of micro croorganisms, ture: ssed students: 6 C 0.0	organisms, r biogeochemi 5 D 0.0 CSc., RNDr.	ies and interanic interani	rections of mini- ms in environ nteractions b FX 0.0	onment, the i etween micr	s with other

University: P. J.	Šafárik	University i	n Košice				
Faculty: Faculty	of Scie	ence					
Course ID: ÚBE GM1/03	V/ C	ourse name:	: Gene Manij	oulations			
Course type, sco Course type: Le Recommended Per week: 2 / 2 Course method	ecture / course Per stu	<pre>/ Practice -load (hours idy period: 2</pre>	5):				
Number of credi	ts: 6						
Recommended s	emeste	er/trimester	of the cours	e:			
Course level: II.,	III.						
Prerequisities: Ú	BEV/U	JGM1/03					
Conditions for co	ourse o	completion:					
Learning outcon	nes:						
Brief outline of t	he cou	rse:					
Recommended li	teratu	re:					
Course language	:						
Notes:							
Course assessme Total number of a		ed students: 1	07				
A	В	С	D	Е	FX	Ν	Р
53.27 21.5 4.67 2.8 2.8 0.93 0.0 14.02							
Provides: Prof. In	ng. Šte	fan Vilček, D	orSc.		· · · · · · · · ·		-
Date of last mod	ificatio	on: 13.02.201	4				
Approved: prof.	RNDr.	Peter Fedore	očko, CSc.				

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	Science	
Course ID: ÚBEV/ IMU/04	Course name: Immunolog	у
Course type, scope a Course type: Practi Recommended cou Per week: Per stud Course method: pro	ce rse-load (hours): ly period: 20s	
Number of credits:	5	
Recommended seme	ester/trimester of the cours	e:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the o	course:	
Recommended liter	ature:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 17	
	Ν	Р
	0.0	100.0
Provides: RNDr. Vla	sta Demečková, PhD.	
Date of last modifica	ation: 13.02.2014	
Approved: prof. RN	Dr. Peter Fedoročko, CSc.	

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ NEM/04	Course name: Implementa	tion of new experimental methodology	
Course type, scope a Course type: Recommended cou Per week: Per stuc Course method: pro	rse-load (hours): ly period:		
Number of credits:	15		
Recommended seme	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 54		
abs n			
	100.0	0.0	
Provides:			
Date of last modifica	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ MK/04	Course name: Internation	al Conference	
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:		
Number of credits:	6		
Recommended seme	ester/trimester of the cour	se:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 123		
	abs	n	
	100.0	0.0	
Provides:		•	
Date of last modifica	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice	
Faculty: Faculty of S	science	
Course ID: ÚBEV/ DKZU/04	Course name: Internation residence	al conference taking place in the country of
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:	
Number of credits: 4	4	
Recommended seme	ester/trimester of the cours	se:
Course level: III.		
Prerequisities:		
Conditions for cours	se completion:	
Learning outcomes:		
Brief outline of the o	course:	
Recommended liter	ature:	
Course language:		
Notes:		
Course assessment Total number of asse	ssed students: 85	
	abs	n
	100.0	0.0
Provides:		
Date of last modifica	ation: 13.02.2014	
Approved: prof. RN	Dr. Peter Fedoročko, CSc.	

University: P. J. Šafárik University in Košice		
Faculty: Faculty of Science		
Course ID: ÚBEV/ UFCM/10Course name: Introduction to Flow Cytometry		
Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 1 / 2 Per study period: 14 / 28 Course method: present		

Number of credits: 4

Recommended semester/trimester of the course:

Course level: II., III.

Prerequisities:

Conditions for course completion:

Learning outcomes:

The goal is to teach the students on II. and III. stage some theoretical and practical aspects of analytical cytometry with special focus on flow cytometry. The course will cover theoretical bases of fluorescence, its detection, multiparametric analyses and practical applications in clinical diagnosis and scientific research.

Brief outline of the course:

Fluorescence: physical bases, detection, various designs of instruments exploiting fluorescence detection, fluorescent dyes, fluorescently labeled antibodies

Flow cytometry: principle of hydrodynamic focusing, signal detection, analog and digital data processing, data plotting, gating. Various types of analyses, basic applications, summary of commercial hardware and software.

Cell sorting: physical principles of cell sorting – advatages and disadvantages, sorting strategies, summary of applications and commercial hardware and software.

Practical software data analyses.

Recommended literature:

1. H.M. Shapiro: Practical Flow Cytometry, WILEY-LISS, 2003. (ISBN:0-471-41125-6)

2. A.L. Givan: Flow Cytomtery: First principles, WILEY-LISS, 2001, (ISBN 0-471-22394-8)

3. J. Dolezel a kol.: Flow Cytometry with Plant Cells, Willey-VCH, 2007, (ISBN:

978-3-527-31487-4)

Course language:

Notes:

Course assessment							
Total numb	Total number of assessed students: 71						
A	В	С	D	Е	FX	Ν	Р
59.15	0.0	12.68	4.23	4.23	0.0	0.0	19.72

Provides: RNDr. Ján Koval', PhD., prof. RNDr. Peter Fedoročko, CSc., prof. RNDr. Pavol Mártonfi, PhD., RNDr. Rastislav Jendželovský, PhD., MVDr. Ľubomír Čulka

Date of last modification: 13.02.2014

Approved: prof. RNDr. Peter Fedoročko, CSc.

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	Science		
Course ID: ÚBEV/ ZNC/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:		
Number of credits:	5		
Recommended seme	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended liter	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	essed students: 34		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modific:	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	Science		
Course ID: ÚBEV/ DNC/04	······································		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:		
Number of credits:	5		
Recommended seme	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended liter	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	essed students: 28		
abs n			
	100.0	0.0	
Provides:			
Date of last modific:	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	Science		
Course ID: ÚBEV/ ZKC/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pr	rse-load (hours): ly period:		
Number of credits: 2	20		
Recommended seme	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 143		
abs n			
	100.0	0.0	
Provides:			
Date of last modifica	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ DKC/04			
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:		
Number of credits:	15		
Recommended seme	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended liter	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 11		
abs n			
	100.0	0.0	
Provides:			
Date of last modific:	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	cience		
Course ID: ÚBEV/ MOBM/09	es		
Course type, scope a Course type: Lectur Recommended cou Per week: 1 / 3 Per Course method: pre	re / Practice rse-load (hours): study period: 14 / 42		
Number of credits: 4	1		
Recommended seme	ster/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
-		nolecular biology and with their applications in or practical work in molecular biology laboratory.	
culturing of tumour of protein concentrat chain reaction, Wester	practice for work under st cell lines, methods for isola tion in cell lysates, measure ern blot, dot-blot, fluorescent	erile/aseptic conditions in cell culture lab, cell ation of nucleic acids from cells, determination ments of enzymatic concentrations. Polymerase microscopy, flowcytometric analyses of cellular arameters, proteomic applications).	
Humana Press, 2009 G. Ecker et al.: Trans Principles in Medicir	nann: Proteomics: Methods		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 18		
	Ν	Р	
	0.0 100.0		
Provides: RNDr. Ver Šemeláková, PhD.	onika Sačková, PhD., doc. R	NDr. Peter Solár, PhD., RNDr. Martina	
Date of last modifica	ntion: 13.02.2014		
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.		

Course ID: UBEV/ MOCY/09 Course name: Molekulárna cytológia Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 2 Per study period: 42 / 28 Course method: present Number of credits: 10 Recommended semester/trimester of the course: 2. Course level: III. Prerequisities: Collisions for course completion: Learning outcomes: Describe and explain attributes and processes within living cells on molecular level. Brief outline of the course: Cells structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell cycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics, Oxford University Press, 2008 Graud Karp: Cell and Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language:	University: P. J. Šafá	rik University in Košice			
MOCY/09 Partice Course type, scope and the method: Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 2 Per study period: 42 / 28 Course method: present Number of credits: 10 Recommended semester/trimester of the course: 2. Course level: III. Prerequisities: Control of the course: Course level: III. Prerequisities: Course level: III. Prerequisities: Colls structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell cycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Brue Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course assessment N P O.0 100.0 P Provides: prof. RNDr. Peter Fedor	Faculty: Faculty of Science				
Course type: Lecture / Practice Recommended course-load (hours): Per week: 3 / 2 Per study period: 42 / 28 Course method: present Number of credits: 10 Recommended semester/trimester of the course: 2. Course level: III. Prerequisities: Conditions for course completion: Learning outcomes: Describe and explain attributes and processes within living cells on molecular level. Brief outline of the course: Cell structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical composition, and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Intercellular communication. Cytoskeleton. Cell division. Cell eycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language: Notes: P O.0 <td< td=""><td>Course ID: ÚBEV/ MOCY/09</td><td colspan="4">ourse ID: ÚBEV/ Course name: Molekulárna cytológia</td></td<>	Course ID: ÚBEV/ MOCY/09	ourse ID: ÚBEV/ Course name: Molekulárna cytológia			
Recommended semester/trimester of the course: 2. Course level: III. Prerequisities: Conditions for course completion: Learning outcomes: Describe and explain attributes and processes within living cells on molecular level. Brief outline of the course: Cells structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell cycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course assessment Total number of assessed students: 15 Notes: O O 0.0 100.0 100.0 P	Course type: Lectur Recommended cour Per week: 3 / 2 Per	e / Practice r se-load (hours): study period: 42 / 28			
Course level: III. Prerequisities: Conditions for course completion: Learning outcomes: Describe and explain attributes and processes within living cells on molecular level. Brief outline of the course: Cells structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell cycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics, Oxford University Press, 2008 Gerald Karp: Cell and Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course assessment Total number of assessed students: 15 N P 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014 <td>Number of credits: 1</td> <th>0</th> <th></th>	Number of credits: 1	0			
Prerequisities: Conditions for course completion: Learning outcomes: Describe and explain attributes and processes within living cells on molecular level. Brief outline of the course: Cells structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell eycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics, Oxford University Press, 2008 Gerald Karp: Cell and Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language: N P 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Recommended seme	ster/trimester of the cours	e: 2.		
Conditions for course completion: Learning outcomes: Describe and explain attributes and processes within living cells on molecular level. Brief outline of the course: Cells structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell cycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics, Oxford University Press, 2008 Gerald Karp: Cell and Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language: N P 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Course level: III.				
Learning outcomes: Describe and explain attributes and processes within living cells on molecular level. Brief outline of the course: Cells structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell cycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics, Oxford University Press, 2008 Gerald Karp: Cell and Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language: Notes: O.0 100.0 P 0.0 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Prerequisities:				
Describe and explain attributes and processes within living cells on molecular level. Brief outline of the course: Cells structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell cycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language: Notes: O.0 100.0 P 0.0 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Conditions for cours	e completion:			
Cells structure, chemical composition and energetic processes in cells. Proteins and nucleic acids, their structure, function and regulation. Membrane systems, structure, membrane transport of chemical compounds and information. Intercellular communication. Cytoskeleton. Cell division. Cell cycle regulation, Cell death. Cytopathology of tumour cell. Recommended literature: Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics, Oxford University Press, 2008 Gerald Karp: Cell and Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language: Notes: Course assessment Total number of assessed students: 15 N P 0.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Learning outcomes: Describe and explain	attributes and processes wit	hin living cells on molecular level.		
Bruce Alberts et al.: Essential Cell Biology. Espero Publishing, Garland Publishing, New York, 1998 David Morgan: The Cell Cycle: Principles of Control, Oxford University Press, 2006 Friedrich Marks et al.: Cellular Signal Processing: An Introduction to the Molecular Mechanisms of Signal Transduction, Garland Science, 2008 Lauren Pecorino: Molecular Biology of Cancer: Mechanisms, Targets, and Therapeutics, Oxford University Press, 2008 Gerald Karp: Cell and Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language: Notes: Course assessment Total number of assessed students: 15 N P 0.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Cells structure, chem their structure, funct chemical compounds	ical composition and energe ion and regulation. Membi and information. Intercellu	ane systems, structure, membrane transport of lar communication. Cytoskeleton. Cell division.		
Gerald Karp: Cell and Molecular Biology: Concepts and Experiments, 6th ed. Wiley, 2009 Course language: Notes: Course assessment Total number of assessed students: 15 N P 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Bruce Alberts et al.: I 1998 David Morgan: The C Friedrich Marks et al. of Signal Transductio Lauren Pecorino: Mo	Essential Cell Biology. Espe Cell Cycle: Principles of Cor : Cellular Signal Processing n, Garland Science, 2008 lecular Biology of Cancer: N	ntrol, Oxford University Press, 2006 An Introduction to the Molecular Mechanisms		
Course language: Notes: Course assessment Total number of assessed students: 15 N P 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014					
Course assessment Total number of assessed students: 15 N P 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Course language:				
N P 0.0 100.0 Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014	Notes:				
0.0100.0Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD.Date of last modification: 13.02.2014	Course assessment Total number of asses	ssed students: 15			
Provides: prof. RNDr. Peter Fedoročko, CSc., doc. RNDr. Jaromír Mikeš, PhD. Date of last modification: 13.02.2014		N P			
Date of last modification: 13.02.2014	0.0 100.0				
	Provides: prof. RND	. Peter Fedoročko, CSc., do	c. RNDr. Jaromír Mikeš, PhD.		
Annroved: prof RNDr Peter Fedoročko. CSc	Date of last modifica	tion: 13.02.2014			
xprivice, prof. READER FOR FOR TOURING, COC.	Approved: prof. RNI	Dr. Peter Fedoročko, CSc.			

University: P. J. Šafa	arik University in Košice		
Faculty: Faculty of S	Science		
Course ID: ÚBEV/ NZ/04			
Course type, scope a Course type: Recommended cou Per week: Per stue Course method: pr	rse-load (hours): dy period:		
Number of credits:	2		
Recommended sem	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cour	se completion:		
Learning outcomes:			
Brief outline of the	course:		
Recommended liter	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	essed students: 71		
	abs	n	
	100.0	0.0	
Provides:			
Date of last modific	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice		
Faculty: Faculty of S	Science		
Course ID: ÚBEV/ RZ/04	Course name: Peer-reviewed collections of papers and monographs published abroad or in in the country of residence		
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:		
Number of credits:	5		
Recommended seme	ester/trimester of the cours	e:	
Course level: III.			
Prerequisities:			
Conditions for cours	se completion:		
Learning outcomes:			
Brief outline of the o	course:		
Recommended litera	ature:		
Course language:			
Notes:			
Course assessment Total number of asse	ssed students: 151		
abs n			
100.0 0.0			
Provides:			
Date of last modifica	ation: 13.02.2014		
Approved: prof. RN	Dr. Peter Fedoročko, CSc.		

University: P. J. Šafá	rik University in Košice			
Faculty: Faculty of S	cience			
Course ID: ÚBEV/ FARM/09	05			
Course type, scope a Course type: Lectur Recommended cour Per week: 2 / 3 Per Course method: pre	re / Practice rse-load (hours): study period: 28 / 42			
Number of credits: 8				
Recommended seme	ster/trimester of the cou	rse:		
Course level: III.				
Prerequisities:				
Conditions for cours	e completion:			
-	with a comprehensive intro of drugs currently used in	oduction to the fundamental Pharmacology and uses medical practice.		
effects, routes of drug Special pharmacolog	(pharmacokinetic and pha g application. y including drugs affectin drugs affecting CNS (drug	rmacodynamic principles), factors influencing drug g the autonomic nervous system, myorelaxants and gs used to treat psychiatric disorders, antiepileptics,		
Recommended litera Finkel et al.: Lippinc pp. 564.		Pharmacology 4th edition, Wolters Kluwer, 2009,		
Course language:				
Notes:				
Course assessment Total number of asse	ssed students: 16			
N P				
	0.0	100.0		
Provides: prof. MVD	r. Ján Mojžiš, DrSc., MU	Dr. Iveta Radváková, PhD.		
Date of last modifica	tion: 13.02.2014			

Faculty, E								
Faculty: Faculty of Science								
Course ID BTR1/06	Course ID: ÚBEV/ Course name: Plant Biotechnology BTR1/06							
Course ty Recomme Per weeks	pe: Lecture ended cours	se-load (hours tudy period:	s):					
Number of	f credits: 6							
Recommer	nded semes	ter/trimester	of the cours	se:				
Course lev	el: I., II., II	[.						
Prerequisi	ties:							
	t, protocols,	completion:						
Learning of To gain the		l practical kno	owledge on p	olant tissue cu	lture in vitro			
	ne of the co							
in vitro un	der sterile c and tissues.	gy of plant cell onditions. Use Immobilised j	e of tissue c	ulture in resea	arch and prax	kis. Cryopre	servation of	
in vitro un plant cells of foreign Recommen Slater A. e Wink M. (1	der sterile c and tissues. genes. nded literat t al.: Plant H	gy of plant cell onditions. Use Immobilised p ure: Biotechnology roduction to N	e of tissue cu plant system	ulture in resea s. Genetic tran	arch and prax nsformation of 2008, 376 p	kis. Cryopre of plants and	servation of l expression	
in vitro un plant cells of foreign Recommen Slater A. e Wink M. (1	der sterile c and tissues. genes. nded literat t al.: Plant H Ed.): An Int s and Intern	gy of plant cell onditions. Use Immobilised p ure: Biotechnology roduction to N	e of tissue cu plant system	ulture in resea s. Genetic tran	arch and prax nsformation of 2008, 376 p	kis. Cryopre of plants and	servation of l expression	
in vitro un plant cells of foreign Recommer Slater A. e Wink M. (1 Periodicals	der sterile c and tissues. genes. nded literat t al.: Plant H Ed.): An Int s and Intern	gy of plant cell onditions. Use Immobilised p ure: Biotechnology roduction to N	e of tissue cu plant system	ulture in resea s. Genetic tran	arch and prax nsformation of 2008, 376 p	kis. Cryopre of plants and	servation of l expression	
in vitro un plant cells of foreign Recommen Slater A. e Wink M. (1) Periodicals Course lan Notes: Course ass	der sterile c and tissues. genes. nded literat t al.: Plant H Ed.): An Int s and Interno guage: sessment	gy of plant cell onditions. Use Immobilised p ure: Biotechnology roduction to N et sources	e of tissue cu plant system . Oxford Un Molecular Bi	ulture in resea s. Genetic tran	arch and prax nsformation of 2008, 376 p	kis. Cryopre of plants and	servation of l expression	
in vitro un plant cells of foreign Recommen Slater A. e Wink M. (1) Periodicals Course lan Notes: Course ass	der sterile c and tissues. genes. nded literat t al.: Plant H Ed.): An Int s and Interno guage: sessment	gy of plant cell onditions. Use Immobilised p ure: Biotechnology roduction to N	e of tissue cu plant system . Oxford Un Molecular Bi	ulture in resea s. Genetic tran	arch and prax nsformation of 2008, 376 p	kis. Cryopre of plants and	servation of l expression	
in vitro un plant cells of foreign Recommen Slater A. e Wink M. (1) Periodicals Course lan Notes: Course ass Total numb	der sterile c and tissues. genes. nded literat t al.: Plant H Ed.): An Int s and Interno guage: sessment ber of assess	gy of plant cell onditions. Use Immobilised p ure: Biotechnology roduction to N et sources	e of tissue cu plant system . Oxford Un Molecular Bi	ulture in resea s. Genetic tran iversity Press otechnology.	arch and prax nsformation of 2008, 376 pj Willey-Black	kis. Cryopre of plants and p. kwell, 2011,	servation of l expression , 601 pp.	
in vitro un plant cells of foreign Recommer Slater A. e Wink M. (I Periodicals Course lan Notes: Course ass Total numb A 36.36 Provides: p PhD., RND	der sterile c and tissues. genes. nded literat t al.: Plant H Ed.): An Int s and Interne iguage: ber of assess B 18.18 prof. RNDr.	gy of plant cell onditions. Use Immobilised p ure: Biotechnology roduction to N et sources sed students: 9 C 17.17 Eva Čellárova šianiková, PhI	e of tissue cu plant system . Oxford Un Molecular Bi 09 D 6.06 á, DrSc., RN	alture in resea s. Genetic transitiversity Press otechnology. E 12.12 IDr. Jana Hen	2008, 376 p Willey-Black FX 5.05 zelyová, RN	kis. Cryopre of plants and p. kwell, 2011, N 0.0 Dr. Daniela	ervation of expression 601 pp. P 5.05 Zubrická,	
in vitro un plant cells of foreign ; Recommer Slater A. e Wink M. (I Periodicals Course lan Notes: Course ass Total numb A 36.36 Provides: p PhD., RND RNDr. Eva	der sterile c and tissues. genes. nded literat t al.: Plant H Ed.): An Internet and Internet guage: sessment ber of assess B 18.18 prof. RNDr. Dr. Anna Mit Vranová, P	gy of plant cell onditions. Use Immobilised p ure: Biotechnology roduction to N et sources sed students: 9 C 17.17 Eva Čellárova šianiková, PhI	e of tissue cr plant system . Oxford Un Molecular Bi 09 D 6.06 á, DrSc., RN D., RNDr. O	alture in resea s. Genetic transitiversity Press otechnology. E 12.12 IDr. Jana Hen	2008, 376 p Willey-Black FX 5.05 zelyová, RN	kis. Cryopre of plants and p. kwell, 2011, N 0.0 Dr. Daniela	ervation of expression 601 pp. P 5.05 Zubrická,	

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚBEV/Course name: Realisation of study/research stay abroadZSP/04						
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:					
Number of credits: 2	2					
Recommended seme	ster/trimester of the cours	e: 6., 8.				
Course level: III.						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the o	course:					
Recommended litera	ature:					
Course language:						
Notes:						
Course assessment Total number of asse	ssed students: 61					
	abs	n				
100.0 0.0						
Provides:						
Date of last modifica	ntion: 13.02.2014					
Approved: prof. RN	Approved: prof. RNDr. Peter Fedoročko, CSc.					

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	cience				
Course ID: ÚBEV/ IG/04Course name: Receiving a grant under Internal Scientific Grant System (VVGS)					
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:				
Number of credits:	-				
Recommended seme	ster/trimester of the cours	e:			
Course level: III.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the o	course:				
Recommended litera	ature:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 114				
	abs	n			
100.0 0.0					
Provides:					
Date of last modifica	ation: 13.02.2014				
Approved: prof. RNDr. Peter Fedoročko, CSc.					

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚBEV/Course name: Review of a Bachelor ThesisVPBB/11						
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:					
Number of credits: 2	2					
Recommended seme	ster/trimester of the cours	e:				
Course level: III.						
Prerequisities:						
Conditions for cours	e completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	iture:					
Course language:						
Notes:						
Course assessment Total number of asse	Course assessment Total number of assessed students: 11					
	abs n					
100.0 0.0						
Provides:						
Date of last modifica	tion: 13.02.2014					
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.					

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚBEV/ Course name: Samostatné štúdium odbornej literatúry SSOL/04						
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:					
Number of credits: 2	2					
Recommended seme	ster/trimester of the cours	2:				
Course level: III.						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the o	course:					
Recommended litera	ature:					
Course language:						
Notes:						
Course assessment Total number of asse	ssed students: 186					
	abs	n				
100.0 0.0						
Provides:						
Date of last modifica	ation: 13.02.2014					
Approved: prof. RN	Approved: prof. RNDr. Peter Fedoročko, CSc.					

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: Dek. PF Course name: Spring School for PhD Students UPJŠ/JSD/14						
Course type, scope a Course type: Lectur Recommended cour Per week: Per stud Course method: pre	e ·se-load (hours): y period: 4d					
Number of credits: 2						
Recommended seme	ster/trimester of the cours	e:				
Course level: III.						
Prerequisities:						
Conditions for cours	e completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	ture:					
Course language:						
Notes:						
Course assessment Total number of asses	Course assessment Total number of assessed students: 52					
	abs n					
100.0 0.0						
Provides: doc. RNDr.	Provides: doc. RNDr. Vladimír Zeleňák, PhD.					
Date of last modifica	Date of last modification: 06.03.2014					
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.					

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚCHV/ Course name: Supervision of Bachelor Thesis VBP/04						
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:					
Number of credits: (5					
Recommended seme	ster/trimester of the cours	e: 6., 8.				
Course level: III.						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the c	course:					
Recommended litera	ature:					
Course language:						
Notes:						
Course assessment Total number of asse	ssed students: 208					
	abs n					
100.0 0.0						
Provides:						
Date of last modifica	Date of last modification: 03.02.2014					
Approved: prof. RNI	Approved: prof. RNDr. Peter Fedoročko, CSc.					

University: P. J. Šafá	rik University in Košice					
Faculty: Faculty of Science						
Course ID: ÚBEV/Course name: Supervision of Student's Scientific ActivityVPSV/04						
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:					
Number of credits: (5					
Recommended seme	ster/trimester of the cours	e: 6., 8.				
Course level: III.						
Prerequisities:						
Conditions for cours	se completion:					
Learning outcomes:						
Brief outline of the c	course:					
Recommended litera	ature:					
Course language:						
Notes:						
Course assessment Total number of asse	ssed students: 9					
	abs n					
100.0 0.0						
Provides:						
Date of last modifica	ntion: 13.02.2014					
Approved: prof. RNI	Dr. Peter Fedoročko, CSc.					

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚBEV/ Course name: Talk given at scholar seminars of department or institute VYS/04						
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present						
Number of credits: 2	2					
Recommended seme	ster/trimester of the cours	e:				
Course level: III.						
Prerequisities:						
Conditions for cours	e completion:					
Learning outcomes:						
Brief outline of the c	ourse:					
Recommended litera	nture:					
Course language:						
Notes:						
Course assessment Total number of asse	ssed students: 138					
	abs n					
100.0 0.0						
Provides:						
Date of last modifica	Date of last modification: 13.02.2014					
Approved: prof. RNDr. Peter Fedoročko, CSc.						

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	cience				
Course ID: ÚBEV/ Course name: Teaching activities PPC/04					
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:				
Number of credits:					
Recommended seme	ster/trimester of the cou	rse:			
Course level: III.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the o	course:				
Recommended litera	ature:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 286				
	abs	n			
100.0 0.0					
Provides:					
Date of last modifica	ation: 13.02.2014				
Approved: prof. RN	Dr. Peter Fedoročko, CSc.				

University: P. J. Šafá	rik University in Košice				
Faculty: Faculty of S	cience				
Course ID: ÚBEV/ Course name: Teaching activities PPC/04					
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pre	rse-load (hours): ly period:				
Number of credits:					
Recommended seme	ster/trimester of the cou	rse:			
Course level: III.					
Prerequisities:					
Conditions for cours	se completion:				
Learning outcomes:					
Brief outline of the o	course:				
Recommended litera	ature:				
Course language:					
Notes:					
Course assessment Total number of asse	ssed students: 286				
	abs	n			
100.0 0.0					
Provides:					
Date of last modifica	ation: 13.02.2014				
Approved: prof. RN	Dr. Peter Fedoročko, CSc.				

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I	University:	рі	Safárik	Iniversit	w in	Košice
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Faculty: Faculty of Science

Course ID: ÚBEV/	Course name: Vertebrate Embryology
EMZ1/00	

Course type, scope and the method: Course type: Lecture

Recommended course-load (hours):

Per week: 2 Per study period: 28

Course method: present

Number of credits: 3

Recommended semester/trimester of the course:

Course level: II., III.

Prerequisities:

Conditions for course completion:

Oral examination.

Learning outcomes:

To provide the students with the basic facts on normal development of animals.

Brief outline of the course:

History of embryology. Asexual and sexual reproduction. Gametogenesis. Conversion of germ cells into female and male gametes, sexual hormones. Fertilization. Development of the embryo. Cleavage of the zygote. The main concepts of embryonic

development of amphioxus: Blastulation, gastrulation, germ layers formation, throughout organogenesis. Cleavage, blastulation, gastrulation and notogenese of the amphibians. Cleavage, blastulation, gastrulation and notogenese of the reptiles. Cleavage, blastulation, gastrulation and notogenese of the aves. Cleavage, blastulation, gastrulation and notogenese of the mammals. Development of the foetal membranes. Implantation. Placentation in mammals. Organogenesis. Muscular and skeletal systems. Digestive system. Cardiovascular system Respiratory system. Urinary system. Male and female reproductive systems. Nervous system. Eye and ear.

Recommended literature:

Langman, J.: Medical Embryology. Williams & Wilkins, Baltimore, London, 1981 Moore, K. L., Persaud, T. V. N.: Before we are born. W.B. Saunders Company Philadelphia, 1993

Course language:

Notes:

Course assessment

Total number of assessed students: 137

А	В	С	D	Е	FX	N	Р	
65.69	14.6	11.68	2.92	2.92	0.73	0.0	1.46	
Provides: doc. RNDr. Zuzana Daxnerová, CSc.								
Date of last modification: 13.02.2014								

Approved: prof. RNDr. Peter Fedoročko, CSc.

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚBEV/ POVK/04	Course name: Work in Organizing Committee of Conference					
Course type, scope and the method: Course type: Recommended course-load (hours): Per week: Per study period: Course method: present						
Number of credits: 2	2					
Recommended seme	ster/trimester of the cours	e:				
Course level: III.						
Prerequisities:						
Conditions for course completion:						
Learning outcomes:						
Brief outline of the c	course:					
Recommended literature:						
Course language:						
Notes:						
Course assessment Total number of assessed students: 25						
abs n						
100.0 0.0						
Provides:						
Date of last modification: 13.02.2014						
Approved: prof. RNDr. Peter Fedoročko, CSc.						

University: P. J. Šafárik University in Košice						
Faculty: Faculty of Science						
Course ID: ÚBEV/ PDS/05	ÚBEV/ Course name: Writing Dissertation Work					
Course type, scope a Course type: Recommended cou Per week: Per stud Course method: pro	rse-load (hours): ly period:					
Number of credits: 2	20					
Recommended seme	ster/trimester of the cours	e:				
Course level: III.	Course level: III.					
Prerequisities:						
Conditions for course completion:						
Learning outcomes:						
Brief outline of the course:						
Recommended literature:						
Course language:						
Notes:						
Course assessment Total number of asse	ssed students: 90					
	abs	n				
100.0 0.0						
Provides:						
Date of last modification: 13.02.2014						
Approved: prof. RNDr. Peter Fedoročko, CSc.						