## Study plan

# Name of study plan: Fyzikální inženýrství - Laserová technika a fotonika

Faculty/Institute/Others:
Department:
Branch of study guaranteed by the department: Welcome page
Garantor of the study branch:
Program of study: Physical Engineering
Type of study: Bachelor full-time
Required credits: 0
Elective courses credits: 180
Sum of credits in the plan: 180
Note on the plan:

Name of the block: Compulsory courses in the specialization Minimal number of credits of the block: 0 The role of the block: PS

Code of the group: BSPFILTF1 Name of the group: BS P\_FIB LTF 1st year Requirement credits in the group: Requirement courses in the group: In this group you have to complete at least 13 courses Credits in the group: 0 Note on the group: Podmínkou skládání zkoušky 01MANZ je získání zápočtu z 01MAN.Podmínkou skládání

Podmínkou skládání zkoušky 01MANZ je získání zápočtu z 01MAN.Podmínkou skládání zkoušky 01LALZ je získání zápočtu z 01LAL

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
02DEF1	History of Physics 1 Igor Jex Martin Štefa ák Igor Jex (Gar.)	Z	2	2+0	Z	PS
02ELMA	Electricity and Magnetism Iskender Yalcinkaya, Josef Schmidt, Ji í Hrivnák, Goce Chadzitaskos, Jan Vysoký Jan Vysoký Josef Schmidt (Gar.)	Z,ZK	6	4+2	L	PS
01LAL	Linear Algebra 1 Petr Ambrož, Lubomíra Dvo áková Lubomíra Dvo áková Lubomíra Dvo áková (Gar.)	Z	2	2P+2C		PS
01LALZ	Linear Algebra 1, exam Petr Ambrož, Lubomíra Dvo áková Lubomíra Dvo áková Lubomíra Dvo áková (Gar.)	ZK	2	0P+0C		PS
01LAL2	Linear Algebra 2 Petr Ambrož, Lubomíra Dvo áková Lubomíra Dvo áková Lubomíra Dvo áková (Gar.)	Z,ZK	4	2P+2C		PS
01MAN	Calculus 1 Pavel Strachota, Miroslav Kolá, Edita Pelantová Pavel Strachota Pavel Strachota (Gar.)	Z	4	4+4		PS
01MANZ	Calculus 1, exam Pavel Strachota, Miroslav Kolá, Edita Pelantová Pavel Strachota Pavel Strachota (Gar.)	ZK	4	0P+0C		PS
01MAN2	Calculus 2 Miroslav Kolá, Edita Pelantová, Maksym Dreval Edita Pelantová Maksym Dreval (Gar.)	Z,ZK	8	4P+4C		PS
02MECH	Mechanics David Be Antonín Hoskovec David Be (Gar.)	Z	4	4+2	Z	PS
02MECHZ	Mechanics - Examination Iskender Yalcinkaya, Goce Chadzitaskos, Stanislav Skoupý, Petr Novotný, David B e , Filip Petrásek, Antonín Hoskovec Antonín Hoskovec David B e (Gar.)	ZK	2	-	Z	PS
00PT	Preparatory Week Petr Ambrož, Milan Krbálek Petr Ambrož Petr Ambrož (Gar.)	Z	2	týden	Z	PS
02TER	Heat and Molecular Physics Filip Petrásek Petr Novotný Petr Jizba (Gar.)	Z,ZK	4	2+2	L	PS

18ZPRO	Basics of Programming Maksym Dreval, Nichita Vatamaniuc, Jan Vondruška, Vladimír Jarý, Miroslav Virius, Jakub Klinkovský, Petr Pauš, František Vold ich, Jan Tomsa, Miroslav Virius Miroslav Virius (Gar.)	Z	4	4C	z	PS
Characteristics of	the courses of this group of Study Plan: Code=BSPFILTF1 Name=	BS P_FIB L	TF 1st ye	ar		
02DEF1	History of Physics 1				Z	2
Physics and its place in	the system of sciences. The relationship of man and nature. Natural sciences in ancient Ori	ientand Greece,	Greek natur	al philosoph	ners, Aristotle	. Physics in
Helenistic period, Archi	med. Arabic science, European science in Middle Ages. Renaissance - da Vinci, Giordano E	Bruno. Copernicu	s, Kepler, Ga	alileo, Huyg	ens. The birth	n of physics
as experimental science	e. Newton and his work.					
02ELMA	Electricity and Magnetism			Z	Z,ZK	6
Electric charge, Coulon	nb's law, electrostatic field, Gauss' law. Electric dipole, polarization. Conductors and dielectri	cs. Electric curre	ent and circui	ts, conduct	vity. Basics o	f the relativity
theory. Electrodynamic	forces, magnetic field. Magnetic dipole, magnetics. Electromagnetic induction, RLC circuits.	Electromagnetic	waves, Max	well equation	ons.	
01LAL	Linear Algebra 1				Z	2
1. Vector space. 2. Line	ar dependence and independence. 3. Basis and dimension. 4. Subspaces of vector spaces.	5. Linear mappir	ngs. 6. Matric	es of linear	mappings. 7	. Frobenius
theorem.						
01LALZ	Linear Algebra 1, exam				ZK	2
01LAL2	Linear Algebra 2			Z	Z,ZK	4
Outline: 1. Inverse matr	ix and operator. 2. Permutation and determinant. 3. Spectral theory (eigenvalue, eigenvector	, diagonalization	). 4. Hermitia	an and quad	Iratic forms. 5	5. Scalar
product and orthogonal	ity. 6. Metric geometry. 7. Riesz theorem and adjoint operator. Outline of the exercises: 1. Me	thods for calculation	ation of inver	se matrices	. 2. Methods	of calculation
	culation of eigenvalues and eigenvectors. 4. Hermitian and quadratic forms. Canonical form.	<ol> <li>Scalar produc</li> </ol>	t and orthog	onality. Calo	culation of ort	hogonal
	etry exercises and examples. 7. Adjoint operators.					
01MAN	Calculus 1				Z	4
Basic calculus (real and	alysis, functions of one real variable, differential calculus).					
01MANZ	Calculus 1, exam				ZK	4
01MAN2	Calculus 2			Z	Z,ZK	8
1. Continuation of differ	ential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence	ce, operations or	n series, abs	olute and co	onditional cor	overgence 3.
	er series, the Cauchy-Hadamard theorem, expansion of function into power series, summatio	on of infinite serie	es. 4. Theory	of integrals	primitives, d	efinite integral
	chniques of integration and application of integrals, Generalized Riemann integral					
02MECH	Mechanics				Z	4
	physical quantities and units. Kinematics of a particle, basic types of motion and their super		•		•	
	n, motion in a central force field, forces in non-inertial reference frames. Mechanics of a system	em of particles, t	wo-body pro	blems, part	icle collisions	s. Mechanics
of a rigid body, rotation.						
02MECHZ	Mechanics - Examination				ZK	2
	ect is the examination according to the plan of studies.					
00PT	Preparatory Week				Z	2
02TER	Heat and Molecular Physics			1	Z,ZK	4
	naterials, heat transfer; stationary and non-stationary heat conduction, heat transfer and per			, ,	•	•
	systems: dielectric and magnetic materials; Maxwell relations and thermodynamic potentials;	kinetic theory: N	laxwell's velo	ocity distribu		
18ZPRO	Basics of Programming				Z	4
	mainly for students with little or no experience in programming. It familiarizes the students v	vith the basic co	ncepts in pro	gramming	and with the I	Python
programming language						

### Code of the group: BSPFILTF2 Name of the group: BS P\_FIB LTF 2nd year

Requirement credits in the group:

Requirement courses in the group: In this group you have to complete at least 11 courses Credits in the group: 0

Note on the group:

Předmět 02TEF1 lze absolvovat až po absolvování předmětu 02MECHZ.Předmět 02TEF2 lze absolvovat až po absolvování předmětů 02ELMA a 02TEF1.

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
02PRA1	Experimental Laboratory 1 Libor Škoda, Jaroslav Biel ik Jaroslav Biel ik (Gar.)	KZ	6	0+4	Z	PS
02PRA2	Experimental Laboratory 2 Libor Škoda, Jaroslav Biel ik Jaroslav Biel ik (Gar.)	ΚZ	6	0+4	L	PS
12LTB1	Laser Technique 1 Helena Jelínková, Jan Šulc, Michal N mec Jan Šulc Helena Jelínková (Gar.)	Z,ZK	3	2P+1C	L	PS
01ANB3	Calculus B 3 Miroslav Kolá , Milan Krbálek <b>Milan Krbálek</b> Miroslav Kolá (Gar.)	Z,ZK	8	4P+4C		PS
01ANB4	<b>Calculus B 4</b> Ji í Mikyška, Miroslav Kolá <b>Ji í Mikyška</b> Milan Krbálek (Gar.)	Z,ZK	6	2P+4C		PS
12NME1	Numerical Methods 1 Pavel Váchal Pavel Váchal (Gar.)	Z,ZK	4	2+2	L	PS
02TEF1	Theoretical Physics 1 Petr Novotný Michal Jex Igor Jex (Gar.)	Z,ZK	4	2+2	Z	PS
02TEF2	Theoretical Physics 2 Petr Novotný, Filip Petrásek Josef Schmidt Petr Novotný (Gar.)	Z,ZK	4	2+2	L	PS

02TSFA	Thermodynamics and Statistical Physics Igor Jex, Jaroslav Novotný Antonín Hoskovec Igor Jex (Gar.)	Z,ZK	4	2+2	L	PS	
02VOAF	Waves, Optics and Atomic Physics Josef Schmidt Jan Vysoký Ji í Tolar (Gar.)	Z,ZK	6	4+2	Z	PS	
12ZMDT	Measurement and Data Processing Ivan Procházka, Josef Blažej Josef Blažej Ivan Procházka (Gar.)	Z,ZK	2	1P+1C	Z	PS	
Characteristics of the	courses of this group of Study Plan: Code=BSPFILTF2 Name	=BS P FIB LT	F 2nd v	ear			
	erimental Laboratory 1		<u> </u>		KZ	6	
						-	
	for students who intend to study some of the physical specializations of FNSPE(bran						
	d in the otherspecializations. In Experimental laboratory students learn how to prepare	• •	•				
	of different experimental procedures and routines), willteach writing the records of m	easurement, proc	essing and	evaluation of	f results. At th	ne same time	
	ge gained in lectures on physics.						
02PRA2 Exp	erimental Laboratory 2				KZ	6	
Lecture is intended especially	for students who intend to study some of the physical specializations of FNSPE(bran	nch Physical Engi	neering, Nu	Iclear Engine	ering). But it	can be also	
attended by students intereste	d in the otherspecializations. In Experimental laboratory students learn how to prepare	for experiments (in	cluding wo	k with thelite	rature), the im	plementation	
of the measurement (acquire	of different experimental procedures and routines), willteach writing the records of m	easurement, proc	essing and	evaluation of	f results. At th	ne same time	
practically extendthe knowled	ge gained in lectures on physics.						
	er Technique 1			7	,ZK	3	
	insverse and Longitudinal Modes. Elements of Open Resonators. Threshold of laser (	oscillations Causi	an boam a		· .	-	
	radiation propagation in resonant medium. Two-level approximation. Equations for po		•		ation. Conere	ant and	
	on. Optical solitons. Photon echo. Superradiation. Amplified spontaneous emission La	asers without optic	cal resonate	or.			
01ANB3 Cal	culus B 3			Z	,ZK	8	
1. Functional sequences and	series - convergence range, criteria of uniform convergence, continuity, limit, different	tiation and integra	tion of func	tional series,	power series	s, Series	
Expansion, Taylor's theorem.	2. Ordinary differential equations - equations of first order (method of integration factor	or, equation of Be	rnoulli, sep	aration of var	iables, homo	geneous	
	and equations of higher order (fundamental system, reduction of order, variation of par					•	
	n). 3. Metric spaces - metric, norm, scalar product, neighborhood, interior and exterio	-			-	-	
	, Hilbert spaces. Orthogonal polynomials. Complete orthogonal systems. 4. Fourier set						
	5. Differential calculus of functions of several variables - limit, continuity, partial and d						
-			ve, graulen	i, iolai denva	lives and tan	gent plane,	
	ns of vector analysis, Jacobi matrix. 6. Functions defined implicitly by one or several e	equations.					
01ANB4 Cal	culus B 4			Z	"ZK	6	
	více prom nných a funkcionálních vektor . [2] Funkce zadané implicitn . [3] Taylorov						
prom nných, nekartézské so	ustavy sou adnic. [5] Lokální, vázané a globální extrémy funkce více prom nných. [6]	Základy teorie mí	iry a obrys	konstrukce L	ebesgueovy	míry. [7]	
Integrální po et funkce více p	rom nných - Riemann v a Lebesgue v integrál, základní vlastnosti, Fubiniova v ta,	v ta o substituci. I	Leviho a Le	besgueova v	r ta. Limita, s	pojitost a	
derivace integrálu podle para	metru. [8] Integrály po k ivkách a plochách. Integrální v ty.						
12NME1 Nur	nerical Methods 1			7	.ZK	4	
	principles of numerical mathematics important for numerical solving of problems imp	ortant for physics	and techno	1	· I	of tasks verv	
	ary differential equations, random numbers) are included in addition to the basic num					-	
	ing language as a demonstration tool. The seminars are held in computer laboratory.		ilegialea e	Inputational	chinonhient		
					71/		
	oretical Physics 1			1	,ZK	4	
	to analytical mechanics. The students acquire knowledge of the basic concepts of the L						
to description of dynamics (N	ewtons, Lagrange, Hamilton and Hamilton-Jacobi equations). The efficiency of these	methods is illustra	ated on eler	mentary exar	nples like the	two-body	
-	em of constrained mass points, and of a rigid body. Advanced parts of the course cov	er differential and	integral pri	nciples of me	echanics. The	subject is	
the first part of the course of	classical theoretical physics (02TEF1, 02TEF2).						
02TEF2 The	oretical Physics 2			Z	,ZK	4	
	in physics. Mechanics of point mass, rigid body and continuum. The special theory of	relativity: relativis	tic mechan			orv in the	
	cal electrodynamics: Maxwell's equations in the Minkowski space-time, electromagne	=				-	
approximation.							
	rmodunamics and Statistical Dhysics				71/	A	
	rmodynamics and Statistical Physics		- P .	1	,ZK	4	
-	s and statistical physics. Thermodynamic potential, the Joule Thomson effect, condition	-			-		
	ionfrom a statistical point of view (classical and quasiclassical regime within the fram		nd grand-c	anonical ens	emble, Fermi	gas, models	
of crystals and the black body radiation). The Boltzmann equation is usedto discusses simple transport phenomena.							
02VOAF Wa	ves, Optics and Atomic Physics			Z	,ZK	6	
Wave phenomena in mechan	ics and electromagnetism: modes, standing and travelling waves, wave packets indis	persive media. Wa	ive optics: p	olarization, i	nterference, o	diffraction,	
	s. Introduction to quantum physics: black body radiation, quantum of energy, photoeff						
equation, stationary states ar				~		-	
	asurement and Data Processing			7	,ZK	2	
	0	normal diatributi-	and its		· I		
-	surements and data processing and result interpretation: errors, precision, accuracy,	normai distributior	i anu its pr	openes, uata	nung, separ	auon or the	
signal from the noise.							
Code of the group	BSPEILTE3						
• •							
Name of the group	o: BS P_FIB LTF 3rd year						
Requirement crec	•						
Requirement crec							

Requirement courses in the group: In this group you have to complete at least 12 courses

Credits in the group: 0

Note on the group:

Zkoušku z předmětu 01RMAF lze skládat až po složení všech zkoušek z Matematické analýzy a Lineární algebry.

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
12BPFI1	Bachelor Project 1 Ivan Richter Ladislav Kalvoda (Gar.)	Z	5	0P+5C		PS
12BPFI2	Bachelor Project 2 Ivan Richter Ladislav Kalvoda (Gar.)	Z	10	0P+10C		PS
02KM1	Quantum Mechanics 1 Martin Štefa ák Martin Štefa ák (Gar.)	Z,ZK	6	4P+2C	Z	PS
12LTB2	Laser Technique 2 Helena Jelínková, Václav Kube ek Václav Kube ek Helena Jelínková (Gar.)	Z,ZK	3	2P+1C	Z	PS
01RMAF	Equations of Mathematical Physics Václav Klika Václav Klika Václav Klika (Gar.)	Z,ZK	7	4P+2C		PS
11BSEM	Bachelor Seminar Radka Mika Havlíková, Ladislav Kalvoda Ladislav Kalvoda Ladislav Kalvoda (Gar.)	Z	1	0P+2C	L	PS
12ZPLT	Basic Laser Technique Laboratory Josef Blažej, Václav Kube ek Josef Blažej Václav Kube ek (Gar.)	KZ	6	0+4	L	PS
12ZPOP	Basic Optical Laboratory Alexandr Jan árek Alexandr Jan árek Alexandr Jan árek (Gar.)	KZ	6	0+4	L	PS
12ZELD	Fundamentals of Electrodynamics Milan Ši or Ivan Richter Ivan Richter (Gar.)	Z,ZK	2	2+0	Z	PS
12ZFS	Fundamentals of Photonic Structures Ivan Richter, Ji í tyroký Ivan Richter Ivan Richter (Gar.)	Z,ZK	2	2P	L	PS
11ZFP	Basic to Solid State Physics Ladislav Kalvoda, Eva Mihóková Ladislav Kalvoda (Gar.)	ZK	3		Z	PS
11ZFPL	Basic to Solid State Physics Eva Mihóková	KZ	2	26P+0C	Z	PS
12ZAOP	Fundamentals of Optics Ivan Richter, Pavel Kwiecien Ivan Richter Ivan Richter (Gar.)	Z,ZK	2	2+0	Z	PS

### Characteristics of the courses of this group of Study Plan: Code=BSPFILTF3 Name=BS P\_FIB LTF 3rd year

12BPFI1	Bachelor Project 1	Z	5					
The bachelor project is l	pased on a topic approved by the administrators of the programme, department and by the dean. The student is guided by the	oroject supervisor	during common					
regular meetings and di	scussions.							
12BPFI2	Bachelor Project 2	Z	10					
The bachelor project is l	ased on a topic approved by the administrators of the programme, department and by the dean. The student is guided by the	oroject supervisor	during common					
regular meetings and di	scussions.							
02KM1	Quantum Mechanics 1	Z,ZK	6					
Abstract: The lecture de	Abstract: The lecture describes the birth of quantum mechanics and description of one particle and more particles by elements of the Hilbert space as well as its time evolution. Besides							
that it includes descripti	on of observable quantities by operators in the Hilbert space and calculation of their spectra.							
12LTB2	Laser Technique 2	Z,ZK	3					
Laser oscillator, the rate	equation, the laser amplifier, Q-switching, mode-locking							
01RMAF	Equations of Mathematical Physics	Z,ZK	7					
The subject of this cours	se is solving integral equations, theory of generalized functions, classification of partial differential equations, theory of integra	al transformations	, and solution of					
partial differential equat	ions (boundary value problem for eliptic PDE, mixed boundary problem for eliptic PDE).							
11BSEM	Bachelor Seminar	Z	1					
In the first part of the se	minar, students familiarize themselves with the general principles of publishing and presenting scientific work and the formal r	equirements for b	achelors degree					
projects at the faculty. T	he second part is designed as a practical training for the defence of the bachelors degree project. The students give oral pres	entations of the o	urrent state of					
the research results ach	ieved during the work on their projects. Each presentation is followed by a discussion on scientific matters as well as on the pos	sibilities of improv	ing the students					
performance.								
12ZPLT	Basic Laser Technique Laboratory	KZ	6					
Lasers, solid state Nd:Y	AG laser, laser crystal, laser discharge lamp, laser cavity, resonator, free-running, Q-switching, laser amplifier. second harmo	nic, He-Ne glow c	ischarges, laser					
diode, diode pumped N	d: YAG laser, CO2 laser marking, laser materials properties, non-linear transmission, laser beam transverse profile, acousto-	ptic modulators.						
12ZPOP	Basic Optical Laboratory	KZ	6					
The practical laboratorie	es give advanced practical skills by experimental work in optics and optoelectronics. Laboratory records must be elaborated.							
12ZELD	Fundamentals of Electrodynamics	Z,ZK	2					
Subject starts by deriva	tion of Maxwell-Lorentz microscopic equations followed by transition to Maxwell macroscopic theory. Using special theory of	elativity formulae	are found for					
transformation of field ve	ectors between two inertial systems of coordinates with appropriate invariants. Wave and Helmholtz equations are derived. By ex	pansion into plane	monochromatic					
	ng these equations are studied in homogeneous media with gradually increasing complexity: isotropic without losses, with ab							
non-isotropic. Finally, so	lution in weakly non-homogeneous madia is presented using the method of eiconal. Individual chapters are illustrated by app	propriate example						
12ZFS	Fundamentals of Photonic Structures	Z,ZK	2					
	pasics of photonic structures, it classifies photonic structures compares them with the electronic structures, summarizes their							
	discusses the basic physics and technology of optical waveguides; it introduces basic linear, nonlinear, and active structures	• •						
	ommunications and sensors. Next, the attention is given to introduction of plasmonic structures and plasmonics, periodic stru							
	faces, and finally to photonic structures for quantum technologies. Finally, the lecture is closed with student presentations on	selected relevant	topics and					
excursions to selected p			_					
11ZFP	Basic to Solid State Physics	ZK	3					
Description of fundamental properties of solids following the regular long distance ordering of atoms in a crystal lattice. Based on the introduced bonding interaction between atoms in								
solids, various types of crystals and their properties are defined. The model of crystalline lattice dynamics in harmonic approximation is described and basic thermal properties of crystals								
	c potential of the crystal lattice is introduced and its relation to the following model describing the energetic state of electrons							
	I. The special consequences of band approach to the physical properties of solids are elucidated. The aim of the course is to menological basis of physical properties of crystalline solids	systematically int						

1 1	sic to Solid State Physics	ttice Beend on the	introduced	1	KZ	2		
Description of fundamental properties of solids following the regular long distance ordering of atoms in a crystal lattice. Based on the introduced bonding interaction between atoms in solids, various types of crystals and their properties are defined. The model of crystalline lattice dynamics in harmonic approximation is described and basic thermal properties of crystals								
are derived. The periodic potential of the crystal lattice is introduced and its relation to the following model describing the energetic state of electrons in solids by means of electron								
	special consequences of band approach to the physical properties of solids are eluc logical basis of physical properties of crystalline solids	idated. The aim of	the course	is to system	natically introdu	ice and		
12ZAOP Fundamentals of Optics Z,ZK 2								
	asics of optics - electromagnetic theory, linear optical physics and material effects, ba	asics of nonlinear	effects, and	1	, ,	ain goal of		
	bachelor level, broad and general information on optics, giving an essential orientat ther elaborated during departmental masters program. The lecture stems from the ele	-	-	-				
	erial medium. It explains basics of linear and nonlinear response in material medium	-	-			-		
	processes induced by boundary conditions at interfaces. It also discusses the conse		-		-			
	their applications in interferometers. Based on the Fresnel diffraction integral, diffraction n this diffraction principle, basic functioning of holography is clarified. Finally, the lectur				-			
	e schema of a paraxial imaging system, and optical aberrations. It shows fundamenta	-	-			geometrical		
Name of the block	: Compulsory elective courses							
	of credits of the block: 0							
The role of the blo								
Code of the group	b: BSPFILTFPV1							
Name of the grou	p: BS P_FIB LTF Required optional courses 1st ye	ear						
Requirement crea	lits in the group:							
Requirement cour	rses in the group: In this group you have to comple	ete at least	t 1 coui	se				
Credits in the grou	up: 0							
Note on the group	Studenti si volí alesp	ooň 1 předmě	ět.					
	Name of the course / Name of the group of courses							
Code	(in case of groups of courses the list of codes of their members)	Completion	Credits	Scope	Semester	Role		
	Tutors, <b>authors</b> and guarantors (gar.)							
12UFN	Introduction to Photonics and Nanostructures Ivan Richter, Pavel Kwiecien, Jan Proška Ivan Richter Ivan Richter (Gar.)	КZ	3	2P+1C	L	PV		
12ULTB	Introduction to Laser Technique	KZ	3	2P+1C	L	PV		
	Helena Jelínková, Jan Šulc, Michal N mec Jan Šulc Helena Jelínková (Gar.)							
Characteristics of the year	courses of this group of Study Plan: Code=BSPFILTFPV1 Nar	ne=BS P_FIB	LTF Rec	quired op	otional cou	rses 1st		
· · · · · · · · · · · · · · · · · · ·	oduction to Photonics and Nanostructures				KZ	3		
Overview of nanostructures a	and nanotechnologies; quantum technologies; quantum nanostructures; photonic structures; phot	ctures; nanophoto	nics and nai	noplasmoni	cs; optical wav	eguides and		
	computer simulations; technological realization; student presentations				1/7			
	oduction to Laser Technique radiation sources; laser principle; classification of lasers; characterization and rough a	application of vario	ous types of		KZ	3 utions The		
laser amplifier, Q-switching, r			, , , , , , , , , , , , , , , , , , ,	100010, 1000				
Codo of the group								
Code of the group								
-	p: BS - Social Sciences							
Requirement cred	<b>S</b> 1							
•	rses in the group: In this group you have to comple	ete at least	t 1 coui	se				
Credits in the grou								
Note on the group		rses is obliga	atory.					
	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their			-				
Code	members)	Completion	Credits	Scope	Semester	Role		
	Tutors, <b>authors</b> and guarantors (gar.)							
00EKOT	Economy in Technology Jana Ková ová	Z	1	2+0		PV		
00ETV	Ethics of Science and Technology Jakub Hají ek <b>Jana Ková ová</b> Jakub Hají ek (Gar.)	Z	1	0+2	L	PV		
00RET	Rhetoric Jana Ková ová Jana Ková ová Beatriz Vadillo Gonzalo (Gar.)	Z	1	0+2		PV		
00UPRA	Introduction to Law Martin ech Jana Ková ová Martin ech (Gar.)	Z	1	0+2		PV		
00UPSY	Introduction to Psychology Jakub Hají ek Jana Ková ová Jakub Hají ek (Gar.)	Z	1	0+2		PV		
· · · · · · · · · · · · · · · · · · ·	courses of this group of Study Plan: Code=BSSPOLVEDY Nat	me=BS - Soci	al Scien	ces	<b>_</b>			
00EKOT Eco	pnomy in Technology			1	Z	1		

00EKOT Economy in Technology The course introduces the basics of micro- and macroeconomics.

00ETV	Ethics of Science and Technology	Z	1			
00RET	Rhetoric	Z	1			
The course is focused on the acquisition of speech and voice techniques and on the rules of correct pronounciation. The course is also devoted to the composition of public speech as well as to its nonverbal aspects. Stylistics exercises, strategies for coping with stage-fright and a short excursion into the history of rhetoric are an integral part of the course.						
00UPRA	Introduction to Law	Z	1			
00UPSY	Introduction to Psychology	Z	1			

Code of the group: BSPJAZYKYZK Name of the group: BS P languages Requirement credits in the group: Requirement courses in the group: In this group you have to complete at least 2 courses Credits in the group: 0

Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
04XAMZK	English for Intermediate Students Examination Jana Ková ová, Slav na Brownová Jana Ková ová Jana Ková ová (Gar.)	ZK	4		Z	PV
04XAPZK	English for Advanced Students Examination Slav na Brownová, Darren Copeland Jana Ková ová Darren Copeland (Gar.)	ZK	4		Z	PV
04XCESZZK	<b>Czech for Foreigners Beginners - Examination</b> Slav na Brownová <b>Jana Ková ová</b> Jana Ková ová (Gar.)	ZK	4		Z	PV
04XCESMZK	Czech for Intermediate Students Examination Jana Ková ová Jana Ková ová Jana Ková ová (Gar.)	ZK	4		Z	PV
04XCESPZK	Czech for Foreign Students - Advanced Examination Jana Ková ová Jana Ková ová Jana Ková ová (Gar.)	ZK	4		Z	PV
04XFMZK	French for Intermediate Students Examination V ra Šlechtová V ra Šlechtová V ra Šlechtová (Gar.)	ZK	4		Z	PV
04XFPZK	French for Advanced Students Examination V ra Šlechtová V ra Šlechtová (Gar.)	ZK	4		Z	PV
04XFZZK	French for Beginners Examination V ra Šlechtová V ra Šlechtová (Gar.)	ZK	3		L	PV
04XNMZK	German for Intermediate Students Examination Miloslava echová Miloslava echová Miloslava echová (Gar.)	ZK	4		Z	PV
04XNPZK	German for Advanced Students Examination Miloslava echová Miloslava echová Miloslava echová (Gar.)	ZK	4		Z	PV
04XRMZK	Russian for Intermediate Students Examination Zhanna Isaeva Zhanna Isaeva Zhanna Isaeva (Gar.)	ZK	4		Z	PV
04XRPZK	Russian for Advanced Students Examination Zhanna Isaeva Zhanna Isaeva Zhanna Isaeva (Gar.)	ZK	4		Z	PV
04XRZZK	Russian for Beginners Examination Zhanna Isaeva <b>Zhanna Isaeva</b> Zhanna Isaeva (Gar.)	ZK	3		L	PV
04XSMZK	Spanish for Intermediate Students Examination Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	ZK	4		Z	PV
04XSPZK	Spanish for Advanced Students Examination Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	ZK	4		Z	PV
04XSZZK	Spanish for Beginners Examination Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	ZK	3		L	PV

### Characteristics of the courses of this group of Study Plan: Code=BSPJAZYKYZK Name=BS P languages

04XAMZK	English for Intermediate Students Examination	ZK	4				
The course content is the examination as given by the study plan. The examination covers the AM1, AM2, and AM3 courses and consists of two parts - written (100 min) and oral							
(20-30 min). The studer	nt is expected to master the AM syllabus and demonstrate the ability to apply their knowledge gained in the three English cou	rses.					
04XAPZK	English for Advanced Students Examination	ZK	4				
The course content is the	e examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability	to apply their kno	wledge obtained				
in the three AP courses	. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from	the student's fiel	d of study.				
04XCESZZK	Czech for Foreigners Beginners - Examination	ZK	4				
The course content is the	, he examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the 04	4XCESZ1,2,3 cou	irses and can				
only be taken after succ	cessful completion of all three courses. Detailed information is to be obtained from the teacher.						
04XCESMZK	Czech for Intermediate Students Examination	ZK	4				
The course content is the	ne examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the C	ESM1,2,3 course	s and can only				
be taken after successf	ul completion of the 3 courses. Detailed information is to be obtained from the teacher.						
04XCESPZK	Czech for Foreign Students - Advanced Examination	ZK	4				
The course content is the	he examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the C	ESP1,2,3 courses	s and can only				
be taken after successf	ul completion of the 3 courses. Detailed information is to be obtained from the teacher.						
04XFMZK	French for Intermediate Students Examination	ZK	4				
The content is the exan	The content is the examination as given by the study programme. The whole French programme is ended with an examination covering the contents of FM1-FM3. The examination						
consists of a written and	consists of a written and oral part and is organized according to Examination Instructions, a document available on the web.						

04XFPZK French for Advanced Students Examination	ZK	4					
The whole French program is ended with an examination covering the contents of FP1-FP3. The examination consists of a written and/or an oral part a		•					
Examination Instructions, a document available on the web. Assessment of the presentation is included into the examination grading.							
04XFZZK French for Beginners Examination	ZK	3					
The content is the examination as given by the study plan. The course is terminated with an examination consisting of oral and written part. The examination consisting of oral and written part.	nation is ruled b	by the document					
Instruction for examination. Its content covers the levels FZ1 - FZ5.							
04XNMZK German for Intermediate Students Examination	ZK	4					
The course content is the examination as given by the study plan. The whole German for Intermediate Students Course is completed by an examination	consisting of tv	vo parts - written					
and oral, which cover the courses NM1 - NM3. The oral part follows after passing the written part successfully and after obtaining the 04NM3 assessm	nent. More detai	led information					
is to be obtained from the teacher.							
04XNPZK German for Advanced Students Examination	ZK	4					
The course content is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination of	consisting of tw	o parts - written					
and oral, which cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded	assessment. M	ore detailed					
information is to be obtained from the teacher.							
04XRMZK Russian for Intermediate Students Examination	ZK	4					
The course content is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowle	dge and skills a	cquired in RM1					
- RM3. Students are eligible for the oral examination only after a prior pass in RM3 and a successful written examination. Students are given instruction	ns by the teach	er.					
04XRPZK Russian for Advanced Students Examination	ZK	4					
The course content is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowle	dge and skills a	cquired in RP1					
- RP3. Students are eligible for the oral examination only after a prior pass in RP3 and a successful written examination. Students are given instruction	is by the teache	r.					
04XRZZK Russian for Beginners Examination	ZK	3					
The course content is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowle	dge and skills a	cquired in RZ1					
- RZ5. Students are eligible for the oral examination only after a prior pass in RZ5 and a successful written examination. Students are given instruction	s by the teache	r.					
04XSMZK Spanish for Intermediate Students Examination	ZK	4					
The course content is the examination as given by the study plan. SMZK examination consists of two parts - written and oral; to be eligible for the written	part, students w	ill have obtained					
non-graded assessment for course SM3. Oral examination follows the written part.							
04XSPZK Spanish for Advanced Students Examination	ZK	4					
The course content is the examination as given by the study plan. Examination SPZK consists of two parts, namely oral and written. The prerequisite for	admission to o	ral part is having					
passed the written test. Examination content is based on syllabi of courses SP1, SP2, and SP3 or on an individual study plan of the student.							
04XSZZK Spanish for Beginners Examination	ZK	3					
The course content is the examination as given by the study plan. Examination consists of two parts - written and oral. Student can register for oral examination consists of two parts - written and oral.	amination only i	f he/she has					
passed the written examination test.							

Name of the block: Elective courses Minimal number of credits of the block: 0 The role of the block: V

Code of the group: BSPFILTFV Name of the group: BS P\_FIB LTF Optional courses Requirement credits in the group: Requirement courses in the group: Credits in the group: 0 Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
12APL	Application of Lasers Helena Jelínková, Alexandr Jan árek Helena Jelínková Helena Jelínková (Gar.)	Z,ZK	2	2+0	Z	V
02DEF2	History of Physics 2 Igor Jex Igor Jex (Gar.)	Z	2	2+0	L	V
14ELM	Electron Microscopy Miroslav Karlík Miroslav Karlík (Gar.)	KZ	2	2P+0C		V
01FKO	Functions of Complex Variable Severin Pošta, Pavel Š oví ek Pavel Š oví ek (Gar.)	Z,ZK	3	2+1		V
02FYS1	Physical Seminar 1 Martin Štefa ák Filip Petrásek (Gar.)	Z	2	0+2	Z	V
04AKS	English Conversation Jana Ková ová Jana Ková ová (Gar.)	Z	1	0+2	L	V
02KM2	Quantum Mechanics 2 Martin Štefa ák Martin Štefa ák Martin Štefa ák (Gar.)	Z,ZK	6	4P+2C	L	V
12LAS	Laser Systems Václav Kube ek Václav Kube ek Václav Kube ek (Gar.)	Z,ZK	3	2+1	L	V
00MAM1	Essentials of High School Course 1 David B e Martin Stefa ák	Z	1	0+1		V
00MAM2	Essentials of High School Math Course 2 Lukáš Heriban Severin Pošta Lukáš Heriban (Gar.)	Z	1	0+1		V

12MPP1	Microprocessor Laboratory 1 David Vyhlídal David Vyhlídal (Gar.)	KZ	4	0+3	Z	V
12MPP2	Microprocessor Laboratory 1 David Vyhlídal David Vyhlídal (Gar.)	KZ	4	0+3	L	V
12MPR1	Microprocessors 1 Miroslav ech Miroslav ech (Gar.)	ZK	4	4+0	Z	V
12MPR2	Microprocessors 2 Miroslav ech Miroslav ech (Gar.)	ZK	2	2+0	L	V
12MOF	Molecular Physics Jan Proška, Martin Michl Martin Michl Jan Proška (Gar.)	ZK	2	2+0	L	V
12NT	Nanotechnology           Jan Proška, Eduard Hulicius Jan Proška Eduard Hulicius (Gar.)	ZK	2	2+0	Z	V
01NME2	Numerical Methods 2 Michal Beneš Michal Beneš Michal Beneš (Gar.)	KZ	2	2+0	L	V
15CH1	General Chemistry 1           Ond ej Holas, Petr Distler, Václav uba Petr Distler Petr Distler (Gar.)	Z	3	2+1	Z	V
15CH2	General Chemistry 2 Ond ej Holas, Petr Distler, Václav uba Petr Distler Petr Distler (Gar.)	Z,ZK	3	2+1	L	V
12OSY	Operating Systems	ZK	3	3+0	Z	V
12PAS	Miroslav ech Miroslav ech Miroslav ech (Gar.) Computer Algebra Systems	Z	2	1P+1C	Z	V
01PRST	Milan Ši or Milan Ši or Milan Ši or (Gar.) Probability and Statistics	Z,ZK	4	3+1	Z	V
18PRC1	Tomáš Hobza Tomáš Hobza Tomáš Hobza (Gar.) Programming in C++ 1	Z	4	2+2	Z	V
18PRC2	Vladimír Jarý, Miroslav Virius <b>Miroslav Virius</b> Miroslav Virius (Gar.) <b>Programming in C++ 2</b> Vladimír Jarý, Miroslav Virius, Jakub Klinkovský <b>Miroslav Virius</b> Miroslav	кz	4	2+2	L	v
12RSEN	Virius (Gar.) Control Systems and Sensors	Z,ZK	4	4	Z	V
TV-1	David Vyhlídal David Vyhlídal David Vyhlídal (Gar.) Physical Education	Z	1		Z	v
TV-2	Physical Education Physical Education	Z	1		L	v
TV-3	Physical Education Physical education	Z	1	0+2	Z	v
TV-4		Z	1	0+2	L	v
14TED	Physical education           Creating Electronic Documents	Z	2	26C		V
11UFP	Aleš Materna, Ji í Martin ík Aleš Materna Aleš Materna (Gar.)           Introduction to Solid State Physics	ZK	3		L	V
11UFPLN	Petr Kolenko Petr Kolenko (Gar.) Introduction to Solid State Physics	ZK	2	2+0	L	V
01UP1	Petr Kolenko Introduction to Probability 1	Z,ZK	3	1P+1C		V
01UP2	Jan Vybíral <b>Jan Vybíral</b> Jan Vybíral (Gar.) Introduction to Probability 2	Z,ZK	3	1P+1C		v
12UNXAP	Milan Krbálek, Michaela Krbálková Michaela Krbálková Milan Krbálek (Gar.) Introduction to UNIX	_, Z	2	1P+1C	L	v
12UVP	Milan Kucha ík Milan Kucha ík Milan Kucha ík (Gar.) Introduction to Scientific Computing	Z	2	1P+1C		v
120VT	Milan Ši or Milan Ši or Milan Ši or (Gar.) Vacuum Technology	KZ	4	2P+2L	Z	v
12VTV	Richard Švejkar Vojt ch Petrá ek Vojt ch Petrá ek (Gar.) Scientific and Technical Computing	Z	2	1+1	L	v
12VPMF	Ivan Procházka Ivan Procházka (Gar.)           Selected Topics in Modern Physics	Z	3	2P+1C		V
12VFM	Jan Pšikal Jan Pšikal Jan Pšikal (Ĝar.) High Frequency and Impulse Circuitry	Z,ZK	2	2+0	L	V
12EPR1	Jaroslav Pavel Jaroslav Pavel Jaroslav Pavel (Gar.) Basic Electronics Practicum 1	Z,ZR KZ	2	0+2	Z	V 
12EPR1	Ivan Procházka, Jaroslav Pavel Ivan Procházka Ivan Procházka (Gar.) Basic Electronics Practicum 2					
	Ivan Procházka, Jaroslav Pavel Ivan Procházka Ivan Procházka (Gar.) Basics of Algorithmization	KZ	3	0+2	L	V
18ZALG	Vladimír Jarý, Miroslav Virius, Petr Pauš, František Vold ich, Jan Tomsa, Zuzana Pet í ková, František Gašpar <b>Vladimír Jarý</b> Miroslav Virius (Gar.)	Z,ZK	4	2+2	L	V
12ZEL1	Basic Electronics 1 Jaroslav Pavel Jaroslav Pavel (Gar.)	Z,ZK	3	2+1	Z	V
	Basic Electronics 2	Z,ZK	3	2+1	L	V
12ZEL2	Jaroslav Pavel Jaroslav Pavel Jaroslav Pavel (Gar.)					
12ZEL2 02ZM1		ZK	2	2P+0C	Z	V

12ZFP	Principles of Plasma Physics Martin Jirka, Ji í Limpouch Martin Jirka Ji í Limpouch (Gar.)	Z,ZK	4	3+1	L	V
12ZFD	Physical Data Visualization Josef Blažej Josef Blažej Josef Blažej (Gar.)	KZ	2	1P+1C	Z	V
Characteristics of	the courses of this group of Study Plan: Code=BSPFILTFV Name	=BS P_FIB L	F Optio	nal cours	ses	•
	Application of Lasers				Z,ZK	2
Application of lasers in in	dustrial technologies, medicine, remote sensing, energetics, telecommunication, military,	entertainment and	d other brar	nches.		
02DEF2	History of Physics 2				Z	2
Development of classica	I mechanics after Newton, Bernoulli's, Euler, Lagrange. Historical development of optics, c	orpuscular and w	ave approa	ch. Electricit	y and magn	etism -
electrostatics, galvanism	, electrodynamics and electromagnetism, Faraday and Maxwell. Thermodynamics and its	laws, statistical pl	nysics, Boltz	zmann. The	birth of mod	lern quantum
	Planck and Einstein. Discovery of radioaktivity, structure of atom, atomic nucleus, Rutherfo	rd and Bohr. The	way to nucle	ear energy,	Elementary	particles,
	cept of Nature and Universe of today.					
14ELM	Electron Microscopy				KZ	2
	ne students are introduced to the microscopic methods used for the characterization of mat		-			
	d electron microscopy and to various types of microscopes. An important part of the course	•				
	ns and tools used in microscopy and to the description of particular parts of the microscopy			-	-	ittraction, types
	on and imaging techniques are also covered. A particular attention is given to analytical me	ethous and imagin	ig technique			
	Functions of Complex Variable			1	Z,ZK	3 In the derivative
	utlining the Jordan curve theorem and the Riemann-Stieltjes integral. Then basic results of c			•		
· ·	d the Cauchy-Riemann equations, holomorphic and analytic functions, the index of a point	•			0	
theorem.	norphic function, analytic continuation, isolated singularities, the maximum modulus principl		iem, me Ca	ucity estima	les, Laureni	series, residue
	Dhysical Sominar 1				Z	2
	Physical Seminar 1 to detailed study of interesting physical problems. It should help students to deeper unders	tanding of fundar	nontale of n	 hysics pros		_
	s are chosen, studied and presented by the students themselves, with the possibility to us	•		, ,		course of
			i laboratory	equipment		1
	English Conversation the student's communication skills acquired throughout their previous studies. It aims to in		of oral aam		Z	1 t will develop
	bus communication situations and will master their communication strategy. They will also	• •				•
	ent will be trained to express their ideas clearly and according to current English usage, ar		•			nu participate
	Quantum Mechanics 2		oonnaonn	· ·	Z,ZK	6
1	bands the introduction to quantum mechanics with more general formalism of quantum the		mathods ar		· .	-
	s used in various applications of quantum mechanics and prepares the students for an effect					
formulations of quantum				intrior otday,	in particular	, or the modelin
	Laser Systems				Z,ZK	3
	econd lasers. Picosecond lasers. High energy laser systems. Laser fusion. Diode-pumped	solid state lasers	Tunable la			-
	conductor lasers for pumping of solid state lasers and diode pumped solid state lasers Am			-	-	-
	. Infrared high power lasers. Submilimeter lasers. Lasers with high degree of coherence. F	-				,
	Essentials of High School Course 1				Z	1
	to mathematical concepts and methods used in the introductory physics course.			I	- 1	·
	Essentials of High School Math Course 2				Z	1
Review of basics of high	6			I	- 1	·
	Microprocessor Laboratory 1				KZ	4
	a development board based on PIC16F873A and PIC16F877A microcontrollers, develop	ment environment	t MPLAB X			mer, ASIX UP
	bugger. Programming in assembly and C language for microcontrollers. Basic operations			,		,
12MPP2	Microprocessor Laboratory 1				KZ	4
	C16F877A internal modules on PVK40 development board: PWM module (Capture/Comp	are), parallel com	munication	1	1	aracter LCD
device), serial communic	cation interface USART, serial communication interface I2C/SPI, microcontroller PIC18F45	K20			-	
12MPR1	Microprocessors 1				ZK	4
1	rocomputer, microprocessor types, memory types CPU, memory, Input output. Code and c	lata, addressing n	nodes( dire			
memory, procedure calls	, IO devices - program control, interrupt. Microprocessor Microchip PIC16F877A, Instructio	n codes- Assemb	ler and Mac	roassemble	r, programm	ing languages.
RISC processors - princi	ples					
12MPR2	Microprocessors 2				ZK	2
	types and addressing. Memory segmentation and paging. Real and privileged mode. Instr	uction set, Assem	bler. descri			
12MOF	Molecular Physics				ZK	2
	f molecules and molecular matter, and on structure-to-physical properties relationship. Me	thods of molecula	ar structure		1	
12NT	Nanotechnology				ZK	2
1	tudents mainly to modern technological methods of preparation of semiconductor, metal a	nd dielectric nano	structures.			
	IBE, MOVPE, EBL, sol-gel and colloidal solution) will be explained. Substantive attention v			-		
nanostructure preparatio	n. Particular emphasis will be focused on detail characterization of "in situ" and "ex situ" te	echniques, their a	pplications f	or heterostr	ucture and r	nanostructure
growths will be discussed	d as well. Some supportive technical methods - lithography, diffusion, evaporation, ion imp	lantation, contact	and dielect	ric layer pre	paration will	be mentioned
as well as soldering and	encasement.					
01NME2	Numerical Methods 2				KZ	2
The course is devoted to	numerical solution of boundary-value problems and intial-boundary-value problems for ordi	nary and partial di	fferential eq	uations. It e	kplains meth	ods converting
boundary-value problem	s to initial-value problems and finite-difference methods for elliptic, parabolic and first-orde	r hyperbolic partia	al differentia	l equations.	1	
15CH1	General Chemistry 1				Z	3
The most important cond	cepts, quantities and units used in chemistry are introduced in the course General Chemis	try I. Their signific	ance and p	ractical use	are illustrate	ed by examples
solved in exercises.						
15CH2	General Chemistry 2			Z	Z,ZK	3
1	uation of the course General chemistry I. The main attention is paid to general principles g	overning chemica	al processes	. Using vari	ous example	es, the fact that
	siples is not restricted only to chemical processes is documented. The significance and pra	actical use of expla	ained princi	ples are illus	strated by ex	amples solved
in exercises.						

	Operating Systems	ZK	3
	el, memory management, process, multitasking, interprocess communication, input/output, drivers, queues, client-server, interr	net communication	n, Multilanguage
	ace, system security, open systems.		
12PAS	Computer Algebra Systems	Z	2
-	duction to computer algebra systems (CAS): their main characteristics, ways and means of using them. Constituent part is re	ealized in compute	er classrooms:
· · · · · · · · · · · · · · · · · · ·	skills with CAS by solving relatively simple and basic tasks from mathematics and physics.		
01PRST	Probability and Statistics	Z,ZK	4
	obability theory and mathematical statistics. The probability theory is build gradually beginning with the classical definition an	-	- 1
	s random variable, distribution function of random variable and characteristics of random variable are treated and basic limit i		ed and proved.
	bry the basic methods of mathematical statistics such as estimation of distribution parameters and hypothesis testing are exp		
18PRC1	Programming in C++ 1	Z	4
	ly the C programming language and non-object oriented features of the C++ language.		
18PRC2	Programming in C++ 2	KZ	4
	object oriented programming and othesr advanced constructs in the C+;+ programming language and the Standard Template		
12RSEN	Control Systems and Sensors	Z,ZK	4
	he theory, analysis, and implementation of linear analog and digital control systems, as well as sensors for various physical q		
	deling and simulation using MATLAB, along with practical measurements conducted by the students on a continuous system with r a continuous system with discrete control (temperature control using a thermoelectric cooler module).	analog control (a s	ervomechanism
TV-1	Physical Education	Z	1
TV-2	Physical Education	Z	1
TV-3	Physical education	Z	1
TV-4	Physical education	Z	1
14TED	Creating Electronic Documents	Z	2
-	and presenting student theses. Individual exercises focus on creating and formatting texts, equations, charts, tables, presenta	ations and entire d	locuments in an
office suite.			
11UFP	Introduction to Solid State Physics	ZK	3
	fundamentals of diffraction stress analysis with a strong emphasis on the illustrations of the capability of X-ray diffraction to	solve engineering	
11UFPLN	Introduction to Solid State Physics	ZK	2
	ure is to introduce the undergraduate students to the study of the solid state physics.		
01UP1	Introduction to Probability 1	Z,ZK	3
	e set of possible results, classical probability, independent random events 2. Probability and combinatorics 3. Probability and g	-	
	, Bayes theorem, medical diagnosis, Simpsons paradox 5.Random variable with discrete state space, its distribution and mea	an value 6.Probler	ms involving the
	e 7.Probabilistic method in graph theory 8.Random algorithms, Morris algorithm and its variants		
01UP2	Introduction to Probability 2	Z,ZK	3
	tinuous random variable and its statistical description. 2. Distribution function and probability density. 3. Axiomatic introduction		
	erical characteristics of continuous random variables. 5. Selected variants of continuous distributions and their characteristics	5. 6. Elementary m	ethods for point
	ng pseudorandom numbers from the selected distribution.		
	Introduction to LINIX	7	2
12UNXAP	Introduction to UNIX	Z	2 softwara
Computer and operating	systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa-	ce. Hardware and	software.
Computer and operating Principles of operating s	y systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working	ce. Hardware and with files. Text ed	software. itors: vi, emacs.
Computer and operating Principles of operating Command interpreter (s	y systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard	ce. Hardware and with files. Text ed tools. Graphical u	software. itors: vi, emacs. iser interface
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n	y systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfaces systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c	ce. Hardware and with files. Text ed tools. Graphical u	software. itors: vi, emacs. iser interface
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail,	systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfact systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications	ce. Hardware and with files. Text ed tools. Graphical u	software. itors: vi, emacs. ıser interface services:
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP	y systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfaces systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network	software. itors: vi, emacs. iser interface services: 2
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP Practically oriented Intro	g systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfact systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network	software. itors: vi, emacs. iser interface services: 2
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP Practically oriented Intro	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interface systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with ug, data analysis, data visualisation and algorithm development.	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network	software. itors: vi, emacs. iser interface services: 2
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfact systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing voluction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools	software. itors: vi, emacs. iser interface services: 2 fort scientific 4
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with ug, data analysis, data visualisation and algorithm development. Vacuum Technology	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ ace; sorption, des	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 sorption; gas
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid n	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with ag, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 orption; gas ve displacement
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic of transport through solid n pumps: Diaphragm, Slic NEG pumps, Ion getter	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with ag, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 orption; gas ve displacement limation and
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP Practically oriented Intro and technicval computir 12VKT Rarefied gasses: basic transport through solid r pumps: Diaphragm, Slic NEG pumps, Ion getter and seals.Practical exer	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with ag, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises.	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv ption pumps, Sub terials and vacuur	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 sorption; gas ve displacement limation and n components
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer n hardware sharing, mail, 12UVP Practically oriented Intro and technicval computir 12VKT Rarefied gasses: basic transport through solid r pumps: Diaphragm, Slic NEG pumps, Ion getter and seals.Practical exer 12VTV	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv ption pumps, Sub terials and vacuur	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 corption; gas ve displacement limation and m components 2
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid in pumps: Diaphragm, Slic NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia	systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv ption pumps, Sub terials and vacuur	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 corption; gas ve displacement limation and m components 2
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid in pumps: Diaphragm, Slic NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with ig, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language.	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The course	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 corption; gas ve displacement limation and m components 2 e is oriented
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid nEG pumps, lon getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The course	software. itors: vi, emacs. user interface services: 2 fort scientific 4 corption; gas ve displacement limation and n components 2 e is oriented 3
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid rpumps: Diaphragm, Slic NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course in	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics is to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours Z of Higgs boson, p	software. itors: vi, emacs. user interface services: 2 fort scientific 4 corption; gas ve displacement limation and m components 2 e is oriented 3 rinciples of light
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid repumps: Diaphragm, Slic NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours z of Higgs boson, p s study program, t	software. itors: vi, emacs. user interface services: 2 fort scientific 4 corption; gas ve displacement limation and n components 2 e is oriented 3 rinciples of light his course does
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid rpumps: Diaphragm, Slic NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with ag, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their progras in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper	ce. Hardware and y with files. Text ed tools. Graphical u omputer. Network z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours z of Higgs boson, p s study program, t	software. itors: vi, emacs. user interface services: 2 fort scientific 4 corption; gas ve displacement limation and n components 2 e is oriented 3 rinciples of light his course does
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intra and technicval computin 12VKT Rarefied gasses: basic transport through solid r pumps: Diaphragm, Slid NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their follo	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with rg, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper wing study.	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Some basic tools KZ ace; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours C G Higgs boson, p s study program, t understanding of	software. itors: vi, emacs. user interface services: 2 fort scientific 4 corption; gas ve displacement limation and n components 2 e is oriented 3 rinciples of light his course does modern physics
Computer and operating Principles of operating s Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intra and technicval computin 12VKT Rarefied gasses: basic transport through solid nEG pumps, lon getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their folloc 12VFT	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp. etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper wing study High Frequency and Impulse Circuitry	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours C S Higgs boson, p s study program, t understanding of Z,ZK	software. itors: vi, emacs. user interface services: 2 fort scientific 4 corption; gas ve displacement liimation and m components 2 e is oriented 3 rinciples of light his course does modern physics 2
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intra and technicval computin 12VKT Rarefied gasses: basic transport through solid rpumps: Diaphragm, Slid NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their folloc 12VFT The goals of course is to	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with rg, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper wing study.	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours C S Higgs boson, p s study program, t understanding of Z,ZK	software. itors: vi, emacs. user interface services: 2 fort scientific 4 corption; gas ve displacement liimation and m components 2 e is oriented 3 rinciples of light his course does modern physics 2
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intra and technicval computin 12VKT Rarefied gasses: basic transport through solid rpumps: Diaphragm, Slid NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their folloc 12VFT The goals of course is to frequency technics, mice	g systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with ag, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation,Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper wing study High Frequency and Impulse Circuitry o collect advanced knowledge in high frequency technics and high speed events. The course is focused on Maxwell equation rowaves gui	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours Z of Higgs boson, p s study program, t understanding of Z,ZK solution, Gunn's o	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 corption; gas ve displacement liimation and m components 2 e is oriented 3 rinciples of light his course does modern physics 2 diodes, high
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intra and technicval computir 12VKT Rarefied gasses: basic transport through solid rpumps: Diaphragm, Slid NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their follo 12VFT The goals of course is to frequency technics, mic 12EPR1	g systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing oduction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation;Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumps. Vacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper wing study High Frequency and Impulse Circuitry o collect advanced knowledge in high frequency technics and high speed events. The course is focused on Maxwell equation	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours Z of Higgs boson, p s study program, t understanding of Z,ZK solution, Gunn's of KZ	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 corption; gas ve displacement limation and m components 2 e is oriented 3 rinciples of light his course does modern physics 2 diodes, high 3
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intra and technicval computir 12VKT Rarefied gasses: basic transport through solid rpumps: Diaphragm, Slid NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their follo 12VFT The goals of course is to frequency technics, mic 12EPR1	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with rg, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion, flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf ing vane rotary. Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics is to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper wing study High Frequency and Impulse Circuitry o collect advanced knowledge in high frequency technics and high speed events. The course is focused on Maxwell equation rowaves guidelines, striplines, oscillators, amplifiers and pulse generators. Basic Electronics Practicu	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours Z of Higgs boson, p s study program, t understanding of Z,ZK solution, Gunn's of KZ	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 corption; gas ve displacement limation and m components 2 e is oriented 3 rinciples of light his course does modern physics 2 diodes, high 3
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intra and technicval computir 12VKT Rarefied gasses: basic transport through solid rpumps: Diaphragm, Slid NEG pumps, Ion getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their follo 12VFT The goals of course is to frequency technics, mic 12EPR1 The aim of the practicur	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c sop, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation; Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper wing study High Frequency and Impulse Circuitry o collect advanced knowledge in high frequency technics and high speed events. The course is focused on Maxwell	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The cours Z of Higgs boson, p s study program, t understanding of Z,ZK solution, Gunn's of KZ	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 corption; gas ve displacement limation and m components 2 e is oriented 3 rinciples of light his course does modern physics 2 diodes, high 3
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid in pumps: Diaphragm, Slid NEG pumps, lon getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their follo 12VFT The goals of course is to frequency technics, mic 12EPR1 The aim of the practicur consists of blocks lastin 12EPR2	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard etworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with rg, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion, flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf ing vane rotary. Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumpsVacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their program in the Fortran language. Selected Topics in Modern Physics is to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this athematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper wing study High Frequency and Impulse Circuitry o collect advanced knowledge in high frequency technics and high speed events. The course is focused on Maxwell equation rowaves guidelines, striplines, oscillators, amplifiers and pulse generators. Basic Electronics Practicu	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The course Z of Higgs boson, p s study program, t understanding of Z,ZK solution, Gunn's of KZ	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 orption; gas ve displacement liimation and n components 2 e is oriented 3 rinciples of light his course does modern physics 2 diodes, high 3 he practicum 3
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid in pumps: Diaphragm, Slid NEG pumps, lon getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their follo 12VFT The goals of course is to frequency technics, mic 12EPR1 The aim of the practicur consists of blocks lastin 12EPR2	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard teworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation; Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumps. Vacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their prograf in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this attem study High Frequency and Impulse Circuitry o collect advanced knowledge in high frequency technics and high speed events. The course is focused on Maxwell equation rowaves guidelines, striplines, oscillators, amplifiers and pulse generators. Basic Electronics Practicum 1	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The course Z of Higgs boson, p s study program, t understanding of Z,ZK solution, Gunn's of KZ	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 orption; gas ve displacement liimation and n components 2 e is oriented 3 rinciples of light his course does modern physics 2 diodes, high 3 he practicum 3
Computer and operating Principles of operating Command interpreter (s X-windows. Computer in hardware sharing, mail, 12UVP Practically oriented Intro and technicval computin 12VKT Rarefied gasses: basic transport through solid in pumps: Diaphragm, Slid NEG pumps, lon getter and seals.Practical exer 12VTV The students get familia mainly to programming 12VPMF The aim of this course is emitting diodes,) with not deal with detailed m and its laws in their follo 12VFT The goals of course is to frequency technics, mic 12EPR1 The aim of the practicur consists of blocks lastin 12EPR2 The aim of the practicur	a systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa- systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working hell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard teworks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c scp, etc. Network applications Introduction to Scientific Computing duction to scientific computing. Constituent part of the course is realized in computer classroom.Students get acquinted with g, data analysis, data visualisation and algorithm development. Vacuum Technology concepts and relations; diffusion,flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surf natter; evaporation, condensation; Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their ing vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsor pumps. Vacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Ma cises. Scientific and Technical Computing r with methods of solving of computational problems in the scientific and technical practice, and with methods of their prograf in the Fortran language. Selected Topics in Modern Physics s to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this attem study High Frequency and Impulse Circuitry o collect advanced knowledge in high frequency technics and high speed events. The course is focused on Maxwell equation rowaves guidelines, striplines, oscillators, amplifiers and pulse generators. Basic Electronics Practicum 1	ce. Hardware and with files. Text ed tools. Graphical u omputer. Network Z some basic tools KZ face; sorption, des properties:-Positiv rption pumps, Sub terials and vacuur Z mming. The course Z of Higgs boson, p s study program, t understanding of Z,ZK solution, Gunn's of KZ	software. itors: vi, emacs. iser interface services: 2 fort scientific 4 orption; gas ve displacement liimation and n components 2 e is oriented 3 rinciples of light his course does modern physics 2 diodes, high 3 he practicum 3

12ZEL1	Basic Electronics 1	Z,ZK	3
The subject provides	primary knowledge of circuit theory concerning principles of electronic circuits in both stationary and harmonic stable state. Cir	cuit analysis meth	ods for linear
circuits include symbol	blic and complex method are explained. Proper circuit analysis is also lectured. The subject's final part deals with transient effect	cts inside linear ci	rcuits.
12ZEL2	Basic Electronics 2	Z,ZK	3
The subject follows up	with the Basic Electronics 1. Semiconductor elements basic properties are explained. Thecourse's final part deals with basic t	hemes of logical	circuits field.
02ZM1	Foundations of Physical Measurements 1	ZK	2
÷	ed for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however,		
	loal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired d	ata on a PC. Stud	ents learn the
basic habits of work in	a physics lab.		
02ZM2		KZ	4
02ZM2	Foundations of Physical Measurements 2 d for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however,		-
02ZM2 The lecture is designed	Foundations of Physical Measurements 2	it can be attende	d by students of
02ZM2 The lecture is designed	Foundations of Physical Measurements 2 ed for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however, loal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired d	it can be attende	d by students of
02ZM2 The lecture is designed other branches. The g	Foundations of Physical Measurements 2 ed for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however, loal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired d	it can be attende	d by students of
02ZM2 The lecture is designed other branches. The g basic habits of work in 12ZFP	Foundations of Physical Measurements 2 ed for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however, poal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired d in a physics lab.	it can be attende ata on a PC. Stud Z,ZK	d by students of ents learn the 4
02ZM2 The lecture is designed other branches. The g basic habits of work in 12ZFP Basic physics of high	Foundations of Physical Measurements 2 ad for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however, ioal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired d in a physics lab. Principles of Plasma Physics	it can be attende ata on a PC. Stud Z,ZK linear theory of w	d by students of ents learn the 4 aves in plasmas
02ZM2 The lecture is designed other branches. The g basic habits of work in 12ZFP Basic physics of high and propagation of el	Foundations of Physical Measurements 2 ad for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however, ioal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired d in a physics lab. Principles of Plasma Physics temperature plasmas is explained using particle, kinetic and fluid approaches. It includes drift motions and adiabatic invariants,	it can be attende ata on a PC. Stud Z,ZK linear theory of w	d by students of ents learn the 4 aves in plasmas
02ZM2 The lecture is designed other branches. The g basic habits of work in 12ZFP Basic physics of high and propagation of el	Foundations of Physical Measurements 2         ad for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however, ioal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired d in a physics lab.         Principles of Plasma Physics         temperature plasmas is explained using particle, kinetic and fluid approaches. It includes drift motions and adiabatic invariants, ectromagnetic waves in inhomogeneous plasmas. Basic non-linear effects, such as ponderomotive force, self-focusing and para	it can be attende ata on a PC. Stud Z,ZK linear theory of w	d by students of ents learn the 4 aves in plasmas

# Code of the group: BSPJAZYKYZAP Name of the group: BS P jazyky zap Requirement credits in the group: Requirement courses in the group: Credits in the group: 0

# Note on the group:

Code	Name of the course / Name of the group of courses (in case of groups of courses the list of codes of their members) Tutors, authors and guarantors (gar.)	Completion	Credits	Scope	Semester	Role
04XAM1	English for Intermediate Students M1 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	Z	V
04XAM2	English for Intermediate Students M2 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	L	V
04XAM3	English for Intermediate Students M3 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	Z	V
04XAP1	English for Advanced Students P1 Jana Ková ová Darren Copeland (Gar.)	Z	2	0+2	Z	V
04XAP2	English for Advanced Students P2 Darren Copeland Darren Copeland (Gar.)	Z	2	0+2	L	V
04XAP3	English for Advanced Students P3 Jana Ková ová Darren Copeland (Gar.)	Z	2	0+2	Z	V
04XCESZ1	Czech for Foreigners - Beginners 1 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	Z	V
04XCESZ2	Czech for Foreigners - Beginners 2 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	L	V
04XCESZ3	Czech for Foreigners - Beginners 3 Jana Ková ová Jana Ková ová (Gar.)	Z	2	2S	Z	V
04XCESM1	Czech for Foreigners - Intermediate 1 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	Z	V
04XCESM2	Czech for Foreigners - Intermediate 2 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	L	V
04XCESM3	Czech for Foreigners - Intermediate 3 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	Z	V
04XCESP1	Czech for Foreign Students - Advanced 1 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	Z	V
04XCESP2	Czech for Foreigners - Advanced 2 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	L	V
04XCESP3	Czech for Foreigners - Advanced 3 Jana Ková ová Jana Ková ová (Gar.)	Z	2	0+2	Z	V
04XFM1	French for Intermediate Students M1 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+2	Z	V
04XFM2	French for Intermediate Students M2 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+2	L	V
04XFM3	French for Intermediate Students M3 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+2	Z	V
04XFP1	French for Advanced Students P1 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+2	Z	V
04XFP2	French for Advanced Students P2 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+2	L	V

	French for Advanded Students P3	7	0	0.0	7	
04XFP3	V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+2	Z	V
04XFZ1	French for Beginners Z1 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+4	L	V
04XFZ2	French for Beginners Z2 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+4	Z	V
04XFZ3	French for Beginners Z3 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+4	L	V
04XFZ4	French for Beginners Z4 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+4	Z	V
04XFZ5	French for Beginners Z5 V ra Šlechtová V ra Šlechtová (Gar.)	Z	2	0+4	L	V
04XNM2	German for Intermediate Students M2 Miloslava echová Miloslava echová (Gar.)	Z	2	0+2	L	V
04XNM1	German for Intermediate Students M1 Miloslava echová Miloslava echová (Gar.)	Z	2	0+2	Z	V
04XNM3	German for Intermediate Students M3 Miloslava echová Miloslava echová (Gar.)	Z	2	0+2	Z	V
04XNP1	German for Advanced Students P1	Z	2	0+2	Z	V
04XNP2	Miloslava echová Miloslava echová (Gar.) German for Advanced Students P2	Z	2	0+2	L	v
04XNP3	Miloslava         echová         Miloslava         echová (Gar.)           German for Advanced Students P3	Z	2	0+2	Z	v
04XRM1	Miloslava echová Miloslava echová (Gar.) Russian for Intermediate Students M1	Z	2	0+2	z	v
	Zhanna Isaeva Zhanna Isaeva (Gar.) Russian for Intermediate Students M2		_	-		-
04XRM2	Zhanna Isaeva Zhanna Isaeva (Gar.) Russian for Intermediate Students M3	Z	2	0+2		V
04XRM3	Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+2	Z	V
04XRP1	Russian for Advanced Students P1 Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+2	Z	V
04XRP2	Russian for Advanced Students P2 Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+2	L	V
04XRP3	Russian for Advanced Students P3 Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+2	Z	V
04XRZ1	Russian for Beginners Z1 Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+4	L	V
04XRZ2	Russian for Beginners Z2 Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+4	Z	V
04XRZ3	Russian for Beginners Z3 Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+4	L	V
04XRZ4	Russian for Beginners Z4 Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+4	z	V
04XRZ5	Russian for Beginners Z5 Zhanna Isaeva Zhanna Isaeva (Gar.)	Z	2	0+4	L	V
04XSM1	Spanish for Intermediate Students M1 Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	Z	2	0+2	Z	V
04XSM2	Spanish for Intermediate Students M3	Z	2	0+2	L	V
04XSM3	Beatriz Vadillo Gonzalo         Beatriz Vadillo Gonzalo (Gar.)           Spanish for Intermediate Students M3	Z	2	0+2	Z	v
04XSP1	Beatriz         Vadillo         Gonzalo         Beatriz         Vadillo         Gonzalo         Gar.)         Spanish for Advanced         Students         P1	Z	2	0+2	Z	v
04XSP2	Beatriz         Vadillo         Gonzalo         Beatriz         Vadillo         Gonzalo         Gar.)         Spanish for Advanced         Students         P2	Z	2	0+2	L	v
	Beatriz Vadillo Gonzalo         Beatriz Vadillo Gonzalo (Gar.)           Spanish for Advanced Students P3			-	_	
04XSP3	Beatriz         Vadillo Gonzalo         Beatriz         Vadillo Gonzalo         Gar.)           Spanish for Beginners Z1         Spanish for Begin	Z	2	0+2	Z	V
04XSZ1	Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	Z	2	0+4	L	V
04XSZ2	Spanish for Beginners Students Z2 Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	Z	2	0+4	Z	V
04XSZ3	Spanish for Beginners Z3 Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	Z	2	0+4	L	V
04XSZ4	Spanish for Beginners Z4 Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	Z	2	0+4	Z	V
04XSZ5	Spanish for Beginners Z5 Beatriz Vadillo Gonzalo Beatriz Vadillo Gonzalo (Gar.)	Z	2	0+4	L	v

### Characteristics of the courses of this group of Study Plan: Code=BSPJAZYKYZAP Name=BS P jazyky zap

04XAM1 English for Intermediate Students M1 Z 2 The course is designed for students who have successfully completed the full secondary school English language course at least at the A2 level of the Common European Framework of Reference for Languages (CEFR). It provides an introduction into English for Specific and Academic Purposes (ESP, EAP), i.e., into fundamentals of vocabulary and style typical of professional oral and written communication situations. Thus it covers topics related to the student's life and needs as well as topics of subtechnical interest. Attention is also paid to extending the knowledge of grammar issues used in EAP.

04XAM2	English for Intermediate Students M2	Z	2
The AM2 course expec	ts the student to have completed the AM1 course. It develops their skills for work with subtechnical texts, focusing also more	on specific gramm	nar, functions,
and lexical items typical	of ESP and EAP (e.g., definition, existence and classification of phenomena, object descriptions). Part of the course is also gu	ided writing. If nec	essary, grammar
revision is included.			
04XAM3	English for Intermediate Students M3	Z	2
The course develops th	e skills that enable students to cope with features typical of professional style. Increasing attention is paid to developing subtect	nical vocabulary	and independent
understanding of profes	ssional texts. Great emphasis is placed on distinguishing different levels of formal and informal oral and written communication	n and their appro	oriate Czech
equivalents. The course	also includes studying abstracts and rules for writing them as well as basic rules for preparing and giving a short presentation	on on a chosen to	pic related to the
student's field.			
04XAP1	English for Advanced Students P1	Z	2
-	for students who have successfully completed the full secondary school English language course (at least the B1 level of th	-	
-	ages - CEFR). It provides an introduction into English for Specific and Academic Purposes (ESP, EAP), i.e., into the fundame		
-	cal of professional oral and written communication situations (fundamentals of terms in mathematics and physics, definitions		-
	and written communication on topics related to the undergraduate's life and needs. It develops skills for free professional writin	,01	, ,
		g (whiting a C v, let	
	sary, revision of selected grammar topics is included.	_	
04XAP2	English for Advanced Students P2	Z	2
	ed on AP1, thus extending the student's skills for working with subtechnical texts, and even with professional texts of chosen		-
	oncentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rheto		
of descriptions, and, if p	possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguist	ically more demai	nding materials.
The course extends the	student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal	writing including t	he sentence and
paragraph structure, lin	king, cohesion and coherence in texts.		
04XAP3	English for Advanced Students P3	Z	2
	d on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text.	It includes training	oral and written
	Ind functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, wri		
	t on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal lar		-
communication.		iguage both in ora	
			-
04XCESZ1	Czech for Foreigners - Beginners 1	Z	2
The course is designed	for students of the English programme. Students will become acquainted with the main characteristics of Czech (phonetic and	nd grammar featu	es) and they will
acquire basic language	and speaking skills. The course focuses on pronunciation exercises, simple social phrases, and oral and written communica	tion in the most co	ommon everyday
situations. The course of	covers roughly lessons 1-3 of eština Express (Czech Express) by L. Holá and P. Bo ilová.		
04XCESZ2	Czech for Foreigners - Beginners 2	Z	2
	munication competences acquired in CESZ1 are further developed. Students deepen their knowledge of the declension and		_
	pics. The course covers roughly lessons 3-5 in Czech Express by L. Holá and P. Bo ilová.	oonjugation oyota	
			0
04XCESZ3	Czech for Foreigners - Beginners 3	Z	2
	elops the language and communication competences acquired in the XCESZ1 and XCESZ2 courses. The teaching focuses		
fixing correct pronuncia	tion and deepening grammar, features through practice, as well as introducing the Czech culture. Students are asked to proc	luce simple texts a	and they practise
frequent types of dialog	ue. They also practise understanding texts in terms of main ideas or looking for specific details in texts. The course covers rou	ghly lessons 5-7 i	n eština expres
1.			
04XCESM1	Czech for Foreigners - Intermediate 1	Z	2
	n correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the	-	
social situations.			
		-	0
04XCESM2	Czech for Foreigners - Intermediate 2	Z	2
	e topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and re	ading skills and tra	ains the student
in understanding comm	on abbreviations, abbreviated words, and mathematical terms and formulas.		
04XCESM3	Czech for Foreigners - Intermediate 3	Z	2
The last course revises	morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is espe-	cially focused on s	stylistics and
	oping the student's writing skills.		
04XCESP1		Z	2
	Czech for Foreign Students - Advanced 1	1	
	course is very good knowledge of the Czech language, i.e., communicative competences at least at level B2 of the Common E		
	evision of standard language structures, but mainly on practising more complex grammatical structures typical of the style of		
basics of functional styl	e of engineering and professional communication, both in spoken and written form. The topics include University Studies and	d Student Life. Wri	tten practice
includes communication	n with teachers and faculty administrators.		
04XCESP2	Czech for Foreigners - Advanced 2	Z	2
This course extends the	e student's knowledge acquired in CESP1 and focuses on difficult language phenomena. It practises working with technical a	and specialist text	s placing greater
emphasis on individual			33
		7	2
04XCESP3	Czech for Foreigners - Advanced 3	Z	2
-	e student's knowledge from CESP2. It includes working with authentic specialist materials, their interpretation and presentati	on, and, finally, pr	esentation of the
	g skills necessary for professional communication are trained.		
04XFM1	French for Intermediate Students M1	Z	2
French - intermediate F	M The objective of this three-semester course is to improve and further develop communication in the French language in bo	oth written and ora	l form. Students
will be able to commun	cate in social interaction and in academic, scientific and professional environment. They will be able to use the language to t	ransmit general a	nd technical
information and to solve	e problems. FM1 The course builds on and further develops linguistic competence acquired at secondary school. It revises, s	vstemizes and ex	bands language
skills gained in previous	study. The following topics are covered: University studies in our country and in France, writing of transactional letters, CV, pe	rsonal statement.	request, answer
	Iture and geography, Paris. Topics of specialization: mathematics, physics. Reading technical and popular science texts, work		-
04XFM2	French for Intermediate Students M2	Z	2
	M1. Linguistic structures and competence acquired in previous study are systemized and expanded. Reading popular science		
	(passives, nominalization, word formation). Topics: physics, power engineering, environment, Internet, success of French sci	ence and technol	ogy, French
scientists, artists and a	rchitects. Description of an object, device, shapes, dimensions, material.		
04XFM3	French for Intermediate Students M3	Z	2
The course is focused of	n improvement and further development of linguistic competence acquired during the follow-up courses. Syntactic structures	, (subordinate and i	nfinitive clauses,
	mpound tenses). Text summaryStudents prepare a written paper which will be delivered in form of an oral presentation in-c		
	specialisation or to their interest and generally covers a technical /applied science topic. It is not a translation but a creative v		
	opolialioation of to their interest and generally covere a continuar/applied coloride topic. It is not a translation but a creative t		

04XFP1	French for Advanced Students P1	Z	2
	he objective of this three-semester course is to improve and further develop communication in the French language in both w		
	e in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit gen		
	The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are r		-
l	ait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transaction		
	advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Top nistry. Reading of technical and popular science texts, further work with these texts and interpretation.	ores of specialization	Jn. mathematics,
04XFP2	French for Advanced Students P2	Z	2
-	tents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication of	1	1
	communication are stressed (passive voice, nominalization, word formation).	on given topics. re	atures typical of
04XFP3	French for Advanded Students P3	Z	2
	on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in	1	1
	rter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally co		
	ork compiled from 3 French sources. Preparation of several set topics for oral examination.		
04XFZ1	French for Beginners Z1	Z	2
	he objective of this 5-level course is to be able to communicate in French orally and in writing in situations of everyday life, in	1	1
-	ench for specific / technical communication and reading of popular science and scientific texts. FZ1 The objective is to be abl	-	-
level, actively using the	e knowledge of chosen elementary language. The contents is roughly outlined by lessons 1 - 7 of the textbook Pravda - Pravd	lová, French for be	eginners
(Francouzština pro za	áte ky). It is extended with situations of communication and functions from the textbook Espaces I, lessons 1-4 : introductions	s, personal informa	ation, asking and
giving the directions, s	mple instructions and questions. Special attention is paid to pronunciation. Spelling is explained in connection with pronuncia	tion and grammar	
04XFZ2	French for Beginners Z2	Z	2
The course is linking u	p with FZ1. Elementary linguistic knowledge and communication skills are expanded. The scope is given by lessons 8 - 13 of	the textbook: Prav	/da - Pravdová :
-	Additional topics and skills are filled in from the textbook Espaces I, lesson 1 - 5 (introductions, invitation, welcoming, agreem	-	
<b>0</b> . <b>0</b> .	p of France, food, expression of will, wish, order, prohibition, pleasure). Correct pronunciation is practiced. Stress on oral comm	nunication. Specifi	c topics covered:
How does the machine	work? A few expressions concerning the study. Name of University and Faculty.		
04XFZ3	French for Beginners Z3	Z	2
The course builts upor	FZ2. Basic linguistic knowledge and skills are developed. The contents is given by lessons 14 - 18 of the textbook: Pravda - I	Pravdová: French	for Beginners.
	ituations are complemented from other materials. Stress is put on oral communication in dialogues and on reading, both for i	nformation and lo	ud as part of
pronunciation practice	Reading covers short adapted texts of general interest first, and later popular science texts.	1	
04XFZ4	French for Beginners Z4	Z	2
	n FZ3. Basic linguistic knowledge and skills are further developed. Oral communication and reading skills are practiced. The	-	
	extbook French for Beginners, and is expanded with topics and functions from other materials. Reading is developed from the le		• •
	course covers generals and specific topics: health- illness, sport, free time, environment, study, travelling in France, Paris, sho	opping, weather, u	niversity in our
	how to write CV, application, topics in mathematics, reading physics - mechanics, informatics, internet.	7	-
04XFZ5	French for Beginners Z5	Z	2
	in FZ4 are further developed, as well as technical language. Students prepare a paper on a chosen popular science topic. The	ey present it orally	
apporal contenta in ap		Topico: op physic	from looturo
-	rered by lessons 24 - 26 of the textbook: Pravda-Pravdova, French for Beginners, and is complemented from other materials.		
notes, success of Fren	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c		
notes, success of Fren subjunctive clauses, g	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive.	lauses, typical cor	njunctions,
notes, success of Fren subjunctive clauses, g 04XNM2	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2	lauses, typical cor	njunctions,
notes, success of Fren subjunctive clauses, g 04XNM2 The course introduces	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation	lauses, typical cor Z on between techno	njunctions, 2 logy and society,
notes, success of Fren subjunctive clauses, g 04XNM2 The course introduces the world at the beginn	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and	lauses, typical cor Z n between techno d car technology e	njunctions, 2 logy and society, tc. Students
notes, success of Fren subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation	lauses, typical cor Z n between techno d car technology e	njunctions, 2 logy and society, tc. Students
notes, success of Frer subjunctive clauses, g 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses).	lauses, typical cor Z n between techno d car technology e	njunctions, 2 logy and society, tc. Students
notes, success of Frer subjunctive clauses, g 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system	Lauses, typical con Z on between techno d car technology e matically revises o Z	njunctions, 2 logy and society, etc. Students ther grammatical 2
notes, success of Frer subjunctive clauses, g 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1	Lauses, typical con Z on between technology e matically revises o Z nd structures (e.g.	njunctions, 2 logy and society, tc. Students ther grammatical 2 the passive) and
notes, success of Frer subjunctive clauses, g 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar	Z         Den between technology ematically revises of         Z         Den between technology ematically revises of         Z         Den between technology ematically revises of         Den between technology ematter tech	ajunctions, 2 logy and society, tc. Students ther grammatical 2 the passive) and , current
notes, success of Frer subjunctive clauses, g 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena arr ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu	Z         Den between technology ematically revises of         Z         Den between technology ematically revises of         Z         Den between technology ematically revises of         Den between technology ematter tech	ajunctions, 2 logy and society, tc. Students ther grammatical 2 the passive) and , current
notes, success of Frer subjunctive clauses, g 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis	Z         Den between technology ematically revises of         Z         Den between technology ematically revises of         Z         Den between technology ematically revises of         Den between technology ematter tech	ajunctions, 2 logy and society, tc. Students ther grammatical 2 the passive) and , current
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis s communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability.	Z         n between technology ematically revises of a structures (e.g. blic and Germany sts, and the fundar	ajunctions, 2 logy and society, to: Students ther grammatical 2 the passive) and , current mentals of IT 2
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginr	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and ing of the 21st century, linguistically more demanding texts on the environment, the language of	Z         n between technology ematically revises of a structures (e.g. blic and Germany sts, and the fundar         Z         nd structures (e.g. blic and Germany sts, and the fundar         Z         nd structures (e.g. blic and Germany sts, and the fundar         C      C	ajunctions, 2 logy and society, ttc. Students ther grammatical 2 the passive) and , current mentals of IT 2 logy and society, ttc. Students
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system irmation and reading aloud, and appropriate language for various purposes in oral and	Z         n between technology ematically revises of a structures (e.g. blic and Germany sts, and the fundar         Z         nd structures (e.g. blic and Germany sts, and the fundar         Z         nd structures (e.g. blic and Germany sts, and the fundar         C      C	ajunctions, 2 logy and society, ttc. Students ther grammatical 2 the passive) and , current mentals of IT 2 logy and society, ttc. Students
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena and ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses).	Z         n between technology ematically revises of a structures (e.g. blic and Germany sts, and the fundar         Z         nd structures (e.g. blic and Germany sts, and the fundar         Z         nd structures (e.g. blic and Germany sts, and the fundar         C      C	ajunctions, 2 logy and society, ttc. Students ther grammatical 2 the passive) and , current mentals of IT 2 logy and society, ttc. Students ther grammatical
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important 04XNP1	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irration and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1	Z       n between technology ematically revises of       Z       ad structures (e.g.       blic and Germany       blic and Germany       cts, and the fundar       Z       on between technology ematically revises of	ajunctions, 2 logy and society, ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ther grammatical 2
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important 04XNP1 This course requires g	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena and sees (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 cod grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leaded grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leaded grammar knowledge.	Z         In between technology ematically revises of a car technology ematically revises of Z         Image: Comparison of the second structures (e.g., blic and Germany sts, and the fundared structures (e.g., blic and Germany sts, and the fundared structures (e.g., blic and the fun	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important 04XNP1 This course requires g course. The course is to	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 od grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leaded on working with technical and scientific texts and practising reading techniques (skimming, scanning, reading for her focused on working with technical and scientific texts and practising reading techniques (skimming, scanning, reading for the procuse	Iauses, typical cor         Z         In between technology ematically revises of         Z         welled off at the b         r detail). It revises	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires g course. The course is to more difficult grammar	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c erund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena and sees (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 cod grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leaded grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leaded grammar knowledge.	Iauses, typical cor         Z         In between technology ematically revises of         Z         welled off at the b         r detail). It revises	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires g course. The course is to more difficult grammar i.e., telephoning.	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive.           German for Intermediate Students M2           other more complex grammatical structures and their application in communication based on technical texts, such as the relation in a reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses).           German for Intermediate Students M1           urus is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication or related topics and is aimed at correct pronunciation, grammatical correctness and understandability.           German for Intermediate Students M3           other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses).           German for Intermediate Students M3         German for Intermediate Students M3           other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on t	Iauses, typical cor         Z         In between technology ematically revises of         d car technology ematically revises of         Z         id structures (e.g.)         blic and Germany         blic and Germany         id structures (e.g.)         blic and Germany         id structures (e.g.)         blic and Germany         id car technology ematically revises of         Z         welled off at the b         r detail). It revises         practical everyday	2 logy and society, ttc. Students ther grammatical 2 the passive) and current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops communication,
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires g course. The course is to more difficult grammar i.e., telephoning. 04XNP2	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena arr ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 ood grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be lean hen focused on working with technical and scientific texts and practising reading techniques (skimming, scanning, reading for structures necessary for understanding a subtechnical text (passive voice, participles, participle structures) and it also foc	Z         n between technology ematically revises of a technology ematically revises of Z         Z         nd structures (e.g. blic and Germany sts, and the fundar dermany sts, and the fundar der technology ematically revises of Z         Z         Discrete technology ematically revises of technology ematter of technolog	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops / communication,
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires g course. The course is to more difficult grammar i.e., telephoning. 04XNP2 The course develops th	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis a communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 ood grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be left hen focused on working with technical and scientific texts (understanding reading techniques (skimming, scanning, reading for structures necessary for understanding a subtechnical text (passive voice, participles, participle structures) and it also focuses on German for Advanced Students P2 e students' skills in working with professional scientific texts (understanding, summar	Iauses, typical cor         Z         In between technology ematically revises of         Car technology ematically revises of         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and germany sts, and the fundar         Z         Ind structures (e.g. blic and german)         Z <td>2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, tc. Students ther grammatical 2 eginning of the and develops / communication, 2 and subtechnical</td>	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, tc. Students ther grammatical 2 eginning of the and develops / communication, 2 and subtechnical
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires g course. The course is to more difficult grammar i.e., telephoning. 04XNP2 The course develops th vocabulary range. It int	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c arund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation imation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis s communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 ood grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leader hen focused on working with technical and scientific texts (understanding reading techniques (skirming, scanning, reading for structures necessary for understanding a subtechnical text (passive voice, participles, participle structures) and it also focuses on German for Advanced Students P2 e students' skills in working with professional scientific texts (understanding, su	Iauses, typical cor         Z         In between technology ematically revises of         Car technology ematically revises of         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and germany sts, and the fundar         Z         Ind structures (e.g. blic and german)         Z <td>2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops / communication, 2 and subtechnical</td>	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops / communication, 2 and subtechnical
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires g course. The course is to more difficult grammar i.e., telephoning. 04XNP2 The course develops th vocabulary range. It into both written and oral (for	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and trmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis s communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 ood grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leaded to structures necessary for understanding a subtechnical text (passive voice, participles, participle structures) and it also focuses on structures necessary for understanding a subtechnical text (passive voice, participles, participle structures) and	Iauses, typical cor         Z         In between technology ematically revises of         Car technology ematically revises of         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind structures (e.g. blic and Germany sts, and the fundar         Z         Ind car technology ematically revises of structures (e.g. blic and structures (e.g. blic a	ajunctions, 2 logy and society, ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ther grammatical 2 eginning of the and develops r communication, 2 and subtechnical communication,
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co word formation process environmental issues th terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires gr course. The course is f more difficult grammar i.e., telephoning. 04XNP2 The course develops th vocabulary range. It int both written and oral (f 04XNP3	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena and sees (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis s communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 ood grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leaded on working with technical and scientific texts (understanding, summarising, note-taking, interpreting) while exten roduces mathematical expressions and texts of nuclear power engineering. Increasing emphasis is placed on understanding and by, letter	Z         m between technology ematically revises of         Z         ad structures (e.g. blic and Germany sts, and the fundar         Z         ad structures (e.g. blic and Germany sts, and the fundar         Z         ad structures (e.g. blic and Germany sts, and the fundar         Z         watically revises of         Z         ding their general         d practising forma         Z <td>2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops communication, 2 and subtechnical communication,</td>	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops communication, 2 and subtechnical communication,
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co- word formation process environmental issues th terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires gr course. The course is in more difficult grammar i.e., telephoning. 04XNP2 The course develops th vocabulary range. It int both written and oral (for 04XNP3 The course consists of	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relatic ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena an ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis a communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relatic ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 cod grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be le hen focused on working with technical and scientific texts and practising reading techniques (skimming, scanning, reading for structures necessary for understanding a subtechnical text (understanding, summarising, note-taking, interpreting) while exten oduc	Iauses, typical correlations, typical correlations, typical correlations, typical correlations, typical correlations, typical correlations, and the fundare in the fundare in the typical correlation, and the fundare is an extension of the typical correct is an extension of typical correct is an extensing typical correct is an extension of typical correct	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops communication, 2 and subtechnical communications
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginr practise reading for info phenomena important 04XNM1 The objective of the co- word formation process environmental issues th terminology. It develop 04XNM3 The course introduces the world at the beginr practise reading for info phenomena important 04XNP1 This course requires gr course. The course is in more difficult grammar i.e., telephoning. 04XNP2 The course develops th vocabulary range. It int both written and oral (for 04XNP3 The course consists of (traffic problems and con-	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena and ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 e students will be chenical text (passive voice, participles, participle structures) and it also focuses on tructures necessary for understanding a subtechnical text (passive voice, participles, participle structures) and it also focuses on tructures mathematical expressions and texts of nuclear power engineering. Increasing emphasis is placed on understanding and CV, le	Iauses, typical cor         Z         In between technology ematically revises of         Imatically revises of         Z         Ind structures (e.g. blic and Germany         blic and Germany         Imatically revises of         Z         Imatically revises of	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops communication, 2 and subtechnical communications n fields such as
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important 04XNP1 This course requires gr course. The course is to more difficult grammar i.e., telephoning. 04XNP2 The course develops the vocabulary range. It into both written and oral (for 04XNP3 The course consists of (traffic problems and con nuclear power engineer	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relatic ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena an ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis a communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relatic ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 cod grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be le hen focused on working with technical and scientific texts and practising reading techniques (skimming, scanning, reading for structures necessary for understanding a subtechnical text (understanding, summarising, note-taking, interpreting) while exten oduc	Iauses, typical cor         Z         In between technology ematically revises of         d car technology ematically revises of         Z         Ind structures (e.g., blic and Germany etc., and the fundar         Z         Ind structures (e.g., blic and Germany etc., and the fundar         Z         Ind between technology ematically revises of         Car technology ematically revises of         Indexter technology ematically revises of         Indexter technology ematically revises of         Z         evelled off at the br         ractical everyday         Z         ding their general         d practising forma         Z         ariety of less com         vocabulary range image         ed. By means of a	ajunctions, 2 logy and society, atc. Students ther grammatical 2 the passive) and , current mentals of IT 2 logy and society, atc. Students ther grammatical 2 eginning of the and develops and subtechnical communication, 2 and subtechnical communication, 2 mon situations n fields such as presentation,
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important 04XNP1 This course requires gr course. The course is to more difficult grammar i.e., telephoning. 04XNP2 The course develops the vocabulary range. It into both written and oral (for 04XNP3 The course consists of (traffic problems and con nuclear power engineer	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu gogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, such as the relation for professional discourse (participles, relative clauses). German for Advanced Students P1 od grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be le hen focused on working with technical and scientific texts (understanding, summarising, note-taking, interpreting) while exten oduces mathematical expressions and texts of nuclear power engineering. Increasing emphasis is placed on understanding an	Iauses, typical cor         Z         In between technology ematically revises of         d car technology ematically revises of         Z         Ind structures (e.g., blic and Germany etc., and the fundar         Z         Ind structures (e.g., blic and Germany etc., and the fundar         Z         Ind between technology ematically revises of         Car technology ematically revises of         Indexter technology ematically revises of         Indexter technology ematically revises of         Z         evelled off at the br         ractical everyday         Z         ding their general         d practising forma         Z         ariety of less com         vocabulary range image         ed. By means of a	ajunctions, 2 logy and society, atc. Students ther grammatical 2 the passive) and , current mentals of IT 2 logy and society, atc. Students ther grammatical 2 eginning of the and develops and subtechnical communication, 2 and subtechnical communication, 2 mon situations n fields such as presentation,
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important 04XNP1 This course requires gr course. The course is to more difficult grammar i.e., telephoning. 04XNP2 The course develops the vocabulary range. It into both written and oral (for 04XNP3 The course consists of (traffic problems and con nuclear power enginees students are trained to practice to and from G	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rrund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 uses is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena and ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 od grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be leaden to cruce necessary for understanding a subtechnical texts (understanding, summarising, note-taking, interpreting) while exten oduces mathematical expressions and texts of nuclear power engineering. Increasing emphasis is placed on understanding an 2V,	Iauses, typical cor         Z         In between technology ematically revises of         d car technology ematically revises of         Z         Ind structures (e.g., blic and Germany etc., and the fundar         Z         Ind structures (e.g., blic and Germany etc., and the fundar         Z         Ind between technology ematically revises of         Car technology ematically revises of         Indexter technology ematically revises of         Indexter technology ematically revises of         Z         evelled off at the br         ractical everyday         Z         ding their general         d practising forma         Z         ariety of less com         vocabulary range image         ed. By means of a	ajunctions, 2 logy and society, atc. Students ther grammatical 2 the passive) and , current mentals of IT 2 logy and society, atc. Students ther grammatical 2 eginning of the and develops and subtechnical communication, 2 and subtechnical communication, 2 mon situations n fields such as presentation,
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co- word formation process environmental issues the terminology. It develop 04XNM3 The course introducess the world at the beginn practise reading for info phenomena important 04XNP1 This course requires gr course. The course is for more difficult grammar i.e., telephoning. 04XNP2 The course develops the vocabulary range. It into both written and oral (for 04XNP3 The course consists of (traffic problems and con nuclear power engineer students are trained to practice to and from G 04XRM1	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and irmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu gogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis is communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relation ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, such as the relation for professional discourse (participles, relative clauses). German for Advanced Students P1 od grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be le hen focused on working with technical and scientific texts (understanding, summarising, note-taking, interpreting) while exten oduces mathematical expressions and texts of nuclear power engineering. Increasing emphasis is placed on understanding an	Z         m between technology ematically revises of a car technology ematically revises of Z         matically revises of a car technology ematically revises of a car technology ematical everyday         Z       Z         Image: Second car technology ematically revises of a car technology ematical everyday         Z       Z         Image: Second car technology ematically revises of a car technology ematical everyday         Z       Z         Image: Second car technology ematically revises of a car technology ematical everyday         Z       Z         Image: Second car technology ematical everyday         Z       Z         Image: Second car technology ematted ematter emails formatical everyday         Z       Z         Image: Second car technology ematter emails formatical ematter emails formatical everyday         Z       Z         Image: Second car technology ematter emails formatical ematter emails formatical ematter emails formatical ematter ematter emails for the course also incomparison formatical ematter emails for the course emails for	2 logy and society, ttc. Students ther grammatical 2 the passive) and , current nentals of IT 2 logy and society, ttc. Students ther grammatical 2 eginning of the and develops communication, 2 and subtechnical communication, 2 mon situations n fields such as presentation, iudes translation
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important 04XNP1 This course requires gr course. The course is to more difficult grammar i.e., telephoning. 04XNP2 The course develops the vocabulary range. It into both written and oral (for 04XNP3 The course consists of (traffic problems and con nuclear power engineers students are trained to practice to and from G 04XRM1 The course is designed	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rrund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relatic ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 use is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g., importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis s communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relatic ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 sod grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be lead hen focused on working with technical and scientific texts (understanding, summarising, note-taking, interpreting) while exten oduces mathematical expressions and texts of nuclear power engineering. Increasing emphasis is placed on understanding an X, le	Z         n between technology ematically revises of         Z         n d structures (e.g. blic and Germany sts, and the fundar         Z         n between technology ematically revises of         Z         n d structures (e.g. blic and Germany sts, and the fundar         Z         n between technology ematically revises of         d car technology ematically revises of         r detail). It revises         practical everyday         Z         ding their general         d practising forma         Z         ariety of less com         vocabulary range image of a structure also incom         Z         bet (both printed also incom	ajunctions, 2 logy and society, atc. Students ther grammatical 2 the passive) and , current mentals of IT 2 logy and society, atc. Students ther grammatical 2 eginning of the and develops and subtechnical communication, 2 and subtechnical communication, 2 mon situations n fields such as presentation, dudes translation 2 und handwritten),
notes, success of Frer subjunctive clauses, gr 04XNM2 The course introduces the world at the beginn practise reading for info phenomena important 04XNM1 The objective of the co word formation proces environmental issues to terminology. It develop 04XNM3 The course introduces the world at the beginn practise reading for info phenomena important 04XNP1 This course requires gr course. The course is to more difficult grammar i.e., telephoning. 04XNP2 The course develops the vocabulary range. It into both written and oral (for 04XNP3 The course consists of (traffic problems and con nuclear power engineers students are trained to practice to and from G 04XRM1 The course is designed basic vocabulary for co	ch science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate c rrund, passive. German for Intermediate Students M2 other more complex grammatical structures and their application in communication based on technical texts, such as the relatic ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Intermediate Students M1 urse is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena ar ses (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Repu ogether with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicis s communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandability. German for Intermediate Students M3 other more complex grammatical structures and their application in communication based on technical texts, such as the relatic ing of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and rmation and reading aloud, and appropriate language for various purposes in oral and written communication. The course system for professional discourse (participles, relative clauses). German for Advanced Students P1 odo grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be lefuend focused on working with technical and scientific texts (understanding, summarising, note-taking, interpreting) while exten oduces mathematical expressions and texts of nuclear power engineering. Increasing emphasis is placed on understanding an V, lettt	Iauses, typical cor         Z         In between technology ematically revises of         Image: Construction of the second corner technology ematically revises of         Z         Indicate technology ematically revises of         Z         Indicate technology ematically revises of         Z         Indicate technology ematically revises of         Image: Construction of technology ematically revises of technology ematical everyday         Image: Construction of technology ematters of technology ematers of technology ematters of technology em	2 logy and society, etc. Students ther grammatical 2 the passive) and current mentals of IT 2 logy and society, etc. Students ther grammatical 2 eginning of the and develops communication, 2 and subtechnical communication, 2 mon situations n fields such as presentation, cudes translation 2 und handwritten), iving directions),

	1	r
04XRM2 Russian for Intermediate Students M2	Z	2
The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the timetable.	7	0
04XRM3 Russian for Intermediate Students M3 The course develops the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5,		2
in the timetable.	nowever, for half of	the time anotted
04XRP1 Russian for Advanced Students P1	Z	2
The entrance requirement for the course is to achieve the B1 CEFR level. The objective of the course is revision of standard language structures, p	1	1
structures, understanding the fundamentals of technical language and training writing skills.	0	U
04XRP2 Russian for Advanced Students P2	Z	2
The course is based on RP1. It expands grammatical structures important for understanding technical texts (verbal adjectives, participles, passives	, verb aspects, spe	ecific syntactic
structures). Stress is put on independent oral and written communication.		-
04XRP3 Russian for Advanced Students P3	Z	2
The course is based on RP2 and is mainly focused on working with technical and scientific texts (reading comprehension, oral and written paraphra courses require good previous knowledge of general language at secondary level (listening, reading, correct communication in everyday situations)		
these skills. Further study is aimed at professional and technical skills (reading technical literature according to the students' specialization, oral an		
develop their subtechnical vocabulary and practice quick and correct communication in professional situations. They will be able to both speak write	-	-
technical topics.		
04XRZ1 Russian for Beginners Z1	Z	2
The course represents the first stage of the five-semester programme, its final aim being reading and understanding professional texts written in Rus	-	-
the Russian alphabet (for both reading and writing skills) and fundamentals of grammar necessary for everyday communication (listening and spea	king). Students wil	I be able to read
a short text with marked stress, understand its contents and summarize it.	-	
04XRZ2 Russian for Beginners Z2	Z	2
The second semester of the programme is designed to teach skills for basic communication in everyday situations and for reading easy and short sable to communicate using short sentences and appropriate structures, and read aloud with confidence a short text without marked stress. They will		
master further grammatical structures. They will have mastered with confidence the Russian alphabet and will be able to use it in writing.		
04XRZ3 Russian for Beginners Z3	Z	2
The course is based on RZ2 and includes further everyday topics, develops understanding of short compact texts on new subtechnical topics (for tra	-	-
and listening) and introduces new grammar. Students will be trained to distinguish intonation patterns while listening to spoken language. They will	-	-
understood, and to express their opinion. Writing skills will be trained on guided writing tasks and note-taking.		
04XRZ4 Russian for Beginners Z4	Z	2
The course is based on RZ3. It improves and expands the knowledge of general language in all four skills (reading and understanding longer texts wit		-
words, oral communication in everyday situations, writing longer texts). Students are trained to use grammar structures effectively (e.g., irregular ve		
from Czech, modality, imperatives, conditionals). They practice and develop communication skills for everyday situations (food, travelling, free time) communication on more specific topics (environment, addictions, the green movement). They become acquainted with various geographical data (e		
forms, look up the information from the timetable, learn about Russian holidays and typical meals.	.g., elbena), lean	
04XRZ5 Russian for Beginners Z5	Z	2
The course expects the student to have completed RZ4. It concentrates predominantly on reading skills (working with professional texts, i.e. understa	anding, extracting a	and summarizing
information from a specialized text) and speaking, and to a certain extent, writing about the professional information obtained by reading the texts.	Communication ski	lls are trained on
everyday topics. Studying grammar is based on professional and technical texts and only includes items typically used in professional communicati		es, participles,
passive voice). Students develop their technical and economic vocabulary, and are also trained in some professional skills (writing a CV, polite requ	· _	-
04XSM1   Spanish for Intermediate Students M1	Z	2
The course is designed for students whose competence is at level B1 of CEFR, i.e. those who studied Spanish in the secondary school. The 3-sem vocabulary and pays attention to further grammar topics (e.g., perifrasis verbales, futuro imperfecto, direct object and indirect object pronouns, neg		•
subjunctive), to written and oral communication on a given everyday or easy subtechnical topic, for which the students are trained by reading texts		-
04XSM2 Spanish for Intermediate Students M3	Z	2
The course develops the students' knowledge from the previous course (SM1). Students are gradually acquainted with fundamentals of Spanish fo	r specific purpose:	1
able to work with specialized texts on the Internet.		
04XSM3 Spanish for Intermediate Students M3	Z	2
The course books are supplemented with additional subtechnical materials, so the students will be gradually acquainted with the peculiarities of aca		
enough to use the Internet in Spanish and search for information of their specialization or field of interest. Students will use the information to write	short articles and	summaries. The
final part of the programme, general Spanish course based on course books, covers presentations and, finally, a written and oral examination.	Z	2
04XSP1   Spanish for Advanced Students P1 Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communica	-	-
of CEFR.	aon. Oourse prere	
04XSP2 Spanish for Advanced Students P2	Z	2
Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and s	yntax and focuses	on independent
written communication.		
04XSP3 Spanish for Advanced Students P3	Z	2
Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is	focused on writte	n communication
based on what students will need in their career.		-
04XSZ1   Spanish for Beginners Z1	Z	2
Course SZ1 is the first stage of the five-semester programme of Spanish studies; during the first stage the students will master phonetics and fundate be able to communicate at an elementary level on topics of everyday life. They will acquire and extend fundamental vocabulary of general Spanish	-	
04XSZ2 Spanish for Beginners Students Z2		2
Course SZ2 is based on course SZ1, and expects students to develop and extend the knowledge and skills acquired so far. Grammar structures and		1
them to understand short adapted written texts and speech. Attention is also paid to cultural differences between Spanish-speaking countries and		
Realia of Spanish-speaking countries are also included.		
04XSZ3 Spanish for Beginners Z3	Z	2
The course is based on course SZ2, and develops the student's vocabulary and grammar structure. The course covers realia (history and culture)		-
mainly of Spain. It pays attention to further grammar topics (pretérito perfecto, pretérito indefinido, pretérito imperfecto, the gerund and the imperati	ve). It includes writ	ten and oral
communication on a given general topic, for which the student is trained by reading texts or listening to them.		

04XSZ4	Spanish for Beginners Z4	7	2
			-
The course is based on	course SZ3. It develops the student's vocabulary and extends the knowledge of the culture and social customs of the Spani	sh speaking coun	tries, mainly of
Spain. It pays attention	to further grammar topics (perifrasis verbales, futuro imperfecto, direct object and indirect object pronouns, negative form of	the imperative, an	id subjunctive),
to written and oral com	nunication on a given general or subtechnical topic, for which the student is trained by reading texts or listening to them.		
04XSZ5	Spanish for Beginners Z5	7	2
			-
The course books are s	upplemented with additional subtechnical materials, so the students will be gradually acquainted with peculiarities of Spanisl	h for specific purp	oses. In its final
part, the general Spanis	sh course based on the course book will end with presentations and, finally, a written and oral examination.		

# List of courses of this pass:

Code	Name of the course	Completion	Credits
00EKOT	Economy in Technology	Z	1
	The course introduces the basics of micro- and macroeconomics.		
00ETV	Ethics of Science and Technology	Z	1
00MAM1	Essentials of High School Course 1	Z	1
·	Students are introduced to mathematical concepts and methods used in the introductory physics course.		
00MAM2	Essentials of High School Math Course 2	Z	1
	Review of basics of high school mathematics.		
00PT	Preparatory Week	Z	2
00RET	Rhetoric	Z	1
The course is focu	sed on the acquisition of speech and voice techniques and on the rules of correct pronounciation. The course is also devoted to the	composition of put	olic speech
as well as to its	nonverbal aspects. Stylistics exercises, strategies for coping with stage-fright and a short excursion into the history of rhetoric are ar	integral part of the	e course.
00UPRA	Introduction to Law	Z	1
00UPSY	Introduction to Psychology	Z	1
01ANB3	Calculus B 3	Z,ZK	8
	uences and series - convergence range, criteria of uniform convergence, continuity, limit, differentiation and integration of functional	· ·	es. Series
equation and exact	r's theorem. 2. Ordinary differential equations - equations of first order (method of integration factor, equation of Bernoulli, separation equation) and equations of higher order (fundamental system, reduction of order, variation of parameters, equations with constant coe	efficients and specia	al right-hand
,	ial equation). 3. Metric spaces - metric, norm, scalar product, neighborhood, interior and exterior points, boundary point, isolated an		
•	s of space, Hilbert spaces. Orthogonal polynomials. Complete orthogonal systems. 4. Fourier series - expansion of functions into Fouri		
series and their co	nvergence. 5. Differential calculus of functions of several variables - limit, continuity, partial and directional derivative, gradient, total Taylor series, elementary terms of vector analysis, Jacobi matrix. 6. Functions defined implicitly by one or several equation		gent plane,
01ANB4	Calculus B 4	Z,ZK	6
	o et funkcí více prom nných a funkcionálních vektor . [2] Funkce zadané implicitn . [3] Taylorovy ady funkce více prom nných. [4]		
	kartézské soustavy sou adnic. [5] Lokální, vázané a globální extrémy funkce více prom nných. [6] Základy teorie míry a obrys konst	• •	
Integrální po et fi	unkce více prom nných - Riemann v a Lebesgue v integrál, základní vlastnosti, Fubiniova v ta, v ta o substituci. Leviho a Lebesgu	ieova v ta. Limita, s	spojitost a
	derivace integrálu podle parametru. [8] Integrály po k ivkách a plochách. Integrální v ty.		
01FKO	Functions of Complex Variable	Z,ZK	3
	om outlining the Jordan curve theorem and the Riemann-Stieltjes integral. Then basic results of complex analysis in one variable are exponent the index of a point with respect to a closed away.	•	
-	on and the Cauchy-Riemann equations, holomorphic and analytic functions, the index of a point with respect to a closed curve, Cauc holomorphic function, analytic continuation, isolated singularities, the maximum modulus principle, Liouville's theorem, the Cauchy est		
theorem, roots or a	theorem.	inates, Laurent sei	ies, residue
01LAL	Linear Algebra 1	Z	2
	Linear dependence and independence. 3. Basis and dimension. 4. Subspaces of vector spaces. 5. Linear mappings. 6. Matrices of l	-	
1. 100101 0000.2	theorem.	indui muppingo	riobolilido
01LAL2	Linear Algebra 2	Z.ZK	4
• • • • • •	e matrix and operator. 2. Permutation and determinant. 3. Spectral theory (eigenvalue, eigenvector, diagonalization). 4. Hermitian ar	1 '	
	onality. 6. Metric geometry. 7. Riesz theorem and adjoint operator. Outline of the exercises: 1. Methods for calculation of inverse matr		
1 0	3. Calculation of eigenvalues and eigenvectors. 4. Hermitian and quadratic forms. Canonical form. 5. Scalar product and orthogonali		
	complements. 6. Geometry exercises and examples. 7. Adjoint operators.		
01LALZ	Linear Algebra 1, exam	ZK	2
01MAN	Calculus 1	Z	4
		-	•
-	Basic calculus (real analysis, functions of one real variable, differential calculus).		
	Basic calculus (real analysis, functions of one real variable, differential calculus).	7.7K	8
01MAN2	Calculus 2	Z,ZK	8 vergence 3.
01MAN2 1. Continuation of		nd conditional conv	vergence 3.
01MAN2 1. Continuation of	Calculus 2 differential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence, operations on series, absolute a	nd conditional conv	vergence 3.
01MAN2 1. Continuation of	Calculus 2 differential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence, operations on series, absolute a power series, the Cauchy-Hadamard theorem, expansion of function into power series, summation of infinite series. 4. Theory of integ	nd conditional conv rals: primitives, defi	vergence 3.
01MAN2 1. Continuation of Real and complex p 01MANZ	Calculus 2 differential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence, operations on series, absolute a bower series, the Cauchy-Hadamard theorem, expansion of function into power series, summation of infinite series. 4. Theory of integ (Riemann definition), techniques of integration and application of integrals, Generalized Riemann integral Calculus 1, exam	nd conditional conv rals: primitives, defi ZK	vergence 3. inite integral
01MAN2 1. Continuation of Real and complex p 01MANZ 01NME2	Calculus 2 differential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence, operations on series, absolute a bower series, the Cauchy-Hadamard theorem, expansion of function into power series, summation of infinite series. 4. Theory of integ (Riemann definition), techniques of integration and application of integrals, Generalized Riemann integral	nd conditional conv rals: primitives, defi ZK KZ	rergence 3. inite integral
01MAN2 1. Continuation of Real and complex p 01MANZ 01NME2 The course is devot	Calculus 2 differential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence, operations on series, absolute a sower series, the Cauchy-Hadamard theorem, expansion of function into power series, summation of infinite series. 4. Theory of integ (Riemann definition), techniques of integration and application of integrals, Generalized Riemann integral Calculus 1, exam Numerical Methods 2	nd conditional conv rals: primitives, defi ZK KZ It explains method:	vergence 3. inite integra
01MAN2 1. Continuation of Real and complex p 01MANZ 01NME2 The course is devot bounc	Calculus 2         differential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence, operations on series, absolute a sower series, the Cauchy-Hadamard theorem, expansion of function into power series, summation of infinite series. 4. Theory of integ (Riemann definition), techniques of integration and application of integrals, Generalized Riemann integral         Calculus 1, exam         Numerical Methods 2         ed to numerical solution of boundary-value problems and intial-boundary-value problems for ordinary and partial differential equations.         lary-value problems and finite-difference methods for elliptic, parabolic and first-order hyperbolic partial difference	nd conditional conv rals: primitives, defi ZK KZ It explains method: rential equations.	vergence 3. inite integral 4 2 s converting
01MAN2 1. Continuation of Real and complex p 01MANZ 01NME2 The course is devot bounc 01PRST	Calculus 2         differential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence, operations on series, absolute a sower series, the Cauchy-Hadamard theorem, expansion of function into power series, summation of infinite series. 4. Theory of integ (Riemann definition), techniques of integration and application of integrals, Generalized Riemann integral         Calculus 1, exam         Numerical Methods 2         ed to numerical solution of boundary-value problems and intial-boundary-value problems for ordinary and partial differential equations.         lary-value problems to initial-value problems and finite-difference methods for elliptic, parabolic and first-order hyperbolic partial differential differential difference	nd conditional conv rals: primitives, defi ZK KZ It explains method: rential equations. Z,ZK	rergence 3. inite integral 4 2 s converting 4
01MAN2 1. Continuation of Real and complex p 01MANZ 01NME2 The course is devot bounc 01PRST It is a basic course	Calculus 2         differential calculus: Taylor's Polynomials, Taylor's formula 2. Infinite series: criteria of convergence, operations on series, absolute a sower series, the Cauchy-Hadamard theorem, expansion of function into power series, summation of infinite series. 4. Theory of integ (Riemann definition), techniques of integration and application of integrals, Generalized Riemann integral         Calculus 1, exam         Numerical Methods 2         ed to numerical solution of boundary-value problems and intial-boundary-value problems for ordinary and partial differential equations.         lary-value problems and finite-difference methods for elliptic, parabolic and first-order hyperbolic partial difference	nd conditional conv rals: primitives, defi ZK KZ It explains method: rential equations. Z,ZK continuing till the K	ergence 3. inite integra 4 2 s converting 4 colmogorov

01RMAF	Equations of Mathematical Physics	Z,ZK	7
The subject of this	course is solving integral equations, theory of generalized functions, classification of partial differential equations, theory of integral tr	ansformations, and	d solution of
	partial differential equations (boundary value problem for eliptic PDE, mixed boundary problem for eliptic PDE).		
01UP1	Introduction to Probability 1	Z,ZK	3
	vith finite set of possible results, classical probability, independent random events 2. Probability and combinatorics 3. Probability and g	-	-
4.Conditional proba	ability, Bayes theorem, medical diagnosis, Simpsons paradox 5. Random variable with discrete state space, its distribution and mean	/alue 6.Problems i	nvolving the
011102	calculation of mean value 7. Probabilistic method in graph theory 8. Random algorithms, Morris algorithm and its variants	774	3
01UP2	Introduction to Probability 2 Il continuous random variable and its statistical description. 2. Distribution function and probability density. 3. Axiomatic introduction o	Z,ZK	-
	Numerical characteristics of continuous random variables. 5. Selected variants of continuous distributions and their characteristics. 6.		
,	estimations. 7. Generating pseudorandom numbers from the selected distribution.	· · · · · · · · · · · · · · · · · ·	
02DEF1	History of Physics 1	Z	2
Physics and its pla	ace in the system of sciences. The relationship of man and nature. Natural sciences in ancient Orientand Greece, Greek natural philo	sophers, Aristotle.	Physics in
Helenistic period,	Archimed. Arabic science, European science in Middle Ages. Renaissance - da Vinci, Giordano Bruno. Copernicus, Kepler, Galileo, I	luygens. The birth	of physics
	as experimental science. Newton and his work.		1
02DEF2	History of Physics 2	Z	2
-	f classical mechanics after Newton, Bernoulli's, Euler, Lagrange. Historical development of optics, corpuscular and wave approach. E		
-	ranism, electrodynamics and electromagnetism, Faraday and Maxwell. Thermodynamics and its laws, statistical physics, Boltzmann. hysics, Planck and Einstein. Discovery of radioaktivity, structure of atom, atomic nucleus, Rutherford and Bohr. The way to nuclear er		-
	standard model. The concept of Nature and Universe of today.	lergy, Liementary	particles,
02ELMA	Electricity and Magnetism	Z,ZK	6
	pulomb's law, electrostatic field, Gauss' law. Electric dipole, polarization. Conductors and dielectrics. Electric current and circuits, cond		-
-	Electrodynamic forces, magnetic field. Magnetic dipole, magnetics. Electromagnetic induction, RLC circuits. Electromagnetic waves, I		-
02FYS1	Physical Seminar 1	Z	2
The seminar is o	levoted to detailed study of interesting physical problems. It should help students to deeper understanding of fundamentals of physical	s presented in the	course of
Mecha	anics. The problems are chosen, studied and presented by the students themselves, with the possibility to use PC and physical laboration	atory equipments.	
02KM1	Quantum Mechanics 1	Z,ZK	6
Abstract: The lectur	re describes the birth of quantum mechanics and description of one particle and more particles by elements of the Hilbert space as we	Il as its time evoluti	ion. Besides
	that it includes description of observable quantities by operators in the Hilbert space and calculation of their spectra.		-
02KM2	Quantum Mechanics 2	Z,ZK	6
	ture expands the introduction to quantum mechanics with more general formalism of quantum theory, approximate methods and path	-	
terminology and me	ethods used in various applications of quantum mechanics and prepares the students for an effective scientific research and further stu formulations of quantum field theory.	uy, in particular, or	the modern
02MECH	Mechanics	7	4
	ysics, physical quantities and units. Kinematics of a particle, basic types of motion and their superposition. Dynamics of a particle, sc	_	1 -
	notion, motion in a central force field, forces in non-inertial reference frames. Mechanics of a system of particles, two-body problems,		
	of a rigid body, rotation.		
02MECHZ	Mechanics - Examination	ZK	2
	The content of the subject is the examination according to the plan of studies.		
02PRA1	Experimental Laboratory 1	KZ	6
	d especially for students who intend to study some of the physical specializations of FNSPE(branch Physical Engineering, Nuclear E		
	ts interested in the otherspecializations. In Experimental laboratory students learn how to prepare for experiments (including work with th nt (acquire of different experimental procedures and routines), willteach writing the records of measurement, processing and evaluati		
of the measurement	practically extend the knowledge gained in lectures on physics.	JIT OF TESUILS. ALL ITE	e same ume
02PRA2	Experimental Laboratory 2	KZ	6
	d especially for students who intend to study some of the physical specializations of FNSPE(branch Physical Engineering, Nuclear E		1
	ts interested in the otherspecializations. In Experimental laboratory students learn how to prepare for experiments (including work with th		
of the measuremen	nt (acquire of different experimental procedures and routines), willteach writing the records of measurement, processing and evaluation	on of results. At the	e same time
	practically extendthe knowledge gained in lectures on physics.		
02TEF1	Theoretical Physics 1	Z,ZK	4
	roduction to analytical mechanics. The students acquire knowledge of the basic concepts of the Lagrange and Hamiltonian formalisms		
	dynamics (Newtons, Lagrange, Hamilton and Hamilton-Jacobi equations). The efficiency of these methods is illustrated on elementar	-	-
problem, the moti	on of a system of constrained mass points, and of a rigid body. Advanced parts of the course cover differential and integral principles the first part of the course of classical theoretical physics (02TEF1, 02TEF2).	of mechanics. The	e subject is
02TEF2	Theoretical Physics 2	Z,ZK	4
	sformations in physics. Mechanics of point mass, rigid body and continuum. The special theory of relativity: relativistic mechanics and		1
	me. Classical electrodynamics: Maxwell's equations in the Minkowski space-time, electromagnetic waves in dielectric media, electron		-
	approximation.	-	
02TER	Heat and Molecular Physics	Z,ZK	4
	of materials, heat transfer; stationary and non-stationary heat conduction, heat transfer and penetration; 1st and 2nd thermodynami		nd real gas,
	ical systems: dielectric and magnetic materials; Maxwell relations and thermodynamic potentials; kinetic theory: Maxwell's velocity dis	ribution,equipartiti	on theorem.
02TSFA	Thermodynamics and Statistical Physics	Z,ZK	4
	nodynamics and statistical physics. Thermodynamic potential, the Joule Thomson effect, conditions of equilibrium, the Braun-Le Chatel		
Basics of many bo	dy description from a statistical point of view (classical and quasiclassical regime within the frame of a canonical and grand-canonical of crystale and the black body radiation). The Baltzmann equation is used to discusses simple transport phenomena	ensemble, Fermi ç	gas, models
001/045	of crystals and the black body radiation). The Boltzmann equation is used to discusses simple transport phenomena.	7 71/	<u> </u>
02VOAF	Waves, Optics and Atomic Physics	Z,ZK	diffraction
	a in mechanics and electromagnetism: modes, standing and travelling waves, wave packets indispersive media. Wave optics: polariza metrical optics. Introduction to quantum physics: black body radiation, quantum of energy, photoeffect, the Compton effect, the de Bro		
	equation, stationary states and spectra of finite systems.	5e	

02ZM1			
The lecture is design	Foundations of Physical Measurements 1	ZK	2
-	ned for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however, it ca		-
other branches. Th	ne goal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired data	on a PC. Studer	nts learn the
	basic habits of work in a physics lab.		
02ZM2	Foundations of Physical Measurements 2	KZ	4
he lecture is desig	ned for students of physical specializations (Experimental particle physics, Physical engineering, Nuclear engineering), however, it ca	an be attended b	y students o
other branches. Th	ne goal of the lecture is to introduce the basics of physical measurements, the methods of processing and evaluation of acquired data	on a PC. Studer	nts learn the
	basic habits of work in a physics lab.		
04AKS	English Conversation	Z	1
	velop the student's communication skills acquired throughout their previous studies. It aims to improve all aspects of oral communicat		will develop
	r various communication situations and will master their communication strategy. They will also practise their listening skills in order to		
-	scussions. The student will be trained to express their ideas clearly and according to current English usage, and become a more conf		
04XAM1	English for Intermediate Students M1	7	2
-	ined for students who have successfully completed the full secondary school English language course at least at the A2 level of the Co		
-	nguages (CEFR). It provides an introduction into English for Specific and Academic Purposes (ESP, EAP), i.e., into fundamentals of v	-	
	nd written communication situations. Thus it covers topics related to the student's life and needs as well as topics of subtechnical inte		
protocolorial oral a	extending the knowledge of grammar issues used in EAP.		
04XAM2	English for Intermediate Students M2	Z	2
-	expects the student to have completed the AM1 course. It develops their skills for work with subtechnical texts, focusing also more on	_	I
	bical of ESP and EAP (e.g., definition, existence and classification of phenomena, object descriptions). Part of the course is also guided to		
	revision is included.	witting. If thecess	ary, grannin
0.41/4.1.40		7	
04XAM3	English for Intermediate Students M3	Z	2
	is the skills that enable students to cope with features typical of professional style. Increasing attention is paid to developing subtechnica	•	•
-	professional texts. Great emphasis is placed on distinguishing different levels of formal and informal oral and written communication a		
equivalents. The co	urse also includes studying abstracts and rules for writing them as well as basic rules for preparing and giving a short presentation on	a chosen topic	related to th
	student's field.		
04XAMZK	English for Intermediate Students Examination	ZK	4
The course conte	ent is the examination as given by the study plan. The examination covers the AM1, AM2, and AM3 courses and consists of two parts	- written (100 mi	in) and oral
(20-3	30 min). The student is expected to master the AM syllabus and demonstrate the ability to apply their knowledge gained in the three E	nglish courses.	
04XAP1	English for Advanced Students P1	Z	2
The course is desig	ned for students who have successfully completed the full secondary school English language course (at least the B1 level of the Cc	mmon Europea	n Framewor
	Languages - CEFR). It provides an introduction into English for Specific and Academic Purposes (ESP, EAP), i.e., into the fundamenta		
	e typical of professional oral and written communication situations (fundamentals of terms in mathematics and physics, definitions, gra	-	
	oral and written communication on topics related to the undergraduate's life and needs. It develops skills for free professional writing (writer and the second		-
	polite request). If necessary, revision of selected grammar topics is included.	ling a o t, lottor t	or approation
04XAP2		Z	2
	English for Advanced Students P2		
The AD2 equires is	based on AD1, thus extending the student's skills for working with subtachnical texts, and even with professional texts of chasen from	_	-
	based on AP1, thus extending the student's skills for working with subtechnical texts, and even with professional texts of chosen brain	ches of science.	According t
he students' needs	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical	ches of science. functions (e.g.,	According t various type
he students' needs of descriptions, and	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically	ches of science. functions (e.g., y more demandi	According t various type ng materials
he students' needs of descriptions, and	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically s the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writing	ches of science. functions (e.g., y more demandi	According t various type ng materials
he students' needs of descriptions, and The course extends	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically s the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.	ches of science. functions (e.g., / more demandin ng including the s	According t various type ng materials sentence an
he students' needs of descriptions, and The course extends 04XAP3	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically s the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writir paragraph structure, linking, cohesion and coherence in texts. English for Advanced Students P3	ches of science. functions (e.g., / more demanding ing including the s	According t various type ng materials sentence an
he students' needs of descriptions, and The course extends 04XAP3 The AP3 course is b	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically s the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 pased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student of the text. It increases the student of the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text. It increases the student to work without any guidance with authentic professional materials and to interpret the text.	ches of science. functions (e.g., / more demandii ng including the s Z ludes training or	According t various type ng materials sentence an 2 al and writte
he students' needs of descriptions, and The course extends 04XAP3 The AP3 course is to communication ski	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically s the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 pased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing	ches of science. functions (e.g., ' / more demandii ng including the s Z ludes training or an abstract) and	According t various type ng materials sentence an 2 al and writte d, if possible
he students' needs of descriptions, and The course extends 04XAP3 The AP3 course is to communication ski	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically s the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu	ches of science. functions (e.g., ' / more demandii ng including the s Z ludes training or an abstract) and	According t various type ng materials sentence an 2 al and writte d, if possible
he students' needs of descriptions, and The course extends 04XAP3 The AP3 course is to communication ski	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically s the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 pased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing	ches of science. functions (e.g., ' / more demandii ng including the s Z ludes training or an abstract) and	According t various type ng materials sentence an 2 al and writte d, if possible
he students' needs of descriptions, and The course extends 04XAP3 The AP3 course is to communication ski	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically s the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu	ches of science. functions (e.g., ' / more demandii ng including the s Z ludes training or an abstract) and	According t various type ng materials sentence an 2 al and writte d, if possible
he students' needs of descriptions, and The course extends 04XAP3 The AP3 course is t communication ski also preparing a p 04XAPZK	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writing paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.	ches of science. functions (e.g., ' y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK	According t various type ng materials sentence an 2 al and writte d, if possible and written 4
he students' needs of descriptions, and The course extends 04XAP3 The AP3 course is t communication ski also preparing a p 04XAPZK The course content	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Dased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes fundament, and objections; taking part in discussion, note-taking; summarizing, writing broject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination	ches of science. functions (e.g., ' y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 edge obtaine
he students' needs of descriptions, and The course extends 04XAP3 The AP3 course is t communication ski also preparing a p 04XAPZK The course content in the three AP of	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writing paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 based on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes fundament, and objections; taking part in discussion, note-taking; summarizing, writing broject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from t	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dge obtaine d of study.
he students' needs of descriptions, and 'he course extends 'he AP3 course is t communication ski also preparing a p 04XAPZK 'he course content in the three AP 04XCESM1	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes fundamental notions; taking part in discussion, note-taking; summarizing, writing boroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination  is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from t Czech for Foreigners - Intermediate 1	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK poly their knowle he student's fiel Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dge obtaine d of study. 2
he students' needs of descriptions, and The course extends The AP3 course is to communication skit also preparing a p 04XAPZK The course content in the three AP 04XCESM1	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes fundamental notions; taking part in discussion, note-taking; summarizing, writing broject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination  is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the students to suppose itemation approximation format morphological phenomena, prepositional phrases, and verb forms as well as on extending the students to suppose itemation approximation format morphological phenomena, prepositional phrases, and verb forms as well as on extending the student is the student phenomena, prepositional phrases, and verb forms as well as on extending the student is the suppose itemation approximation is presented in the phenomena, prepositional phrases, and verb forms as well as on extending the student is the suppose itemation approximation of a topic from the suppose itemation is presented in the phenomena, prepositional phrases, and verb forms	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK poly their knowle he student's fiel Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dge obtaine d of study. 2
he students' needs of descriptions, and The course extends The AP3 course is to communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes fundamental notions; taking part in discussion, note-taking; summarizing, writing boroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination English for Advanced Students Examination Courses. The examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stus social situations.	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's fiel Z udent's vocabula	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 doge obtaine d of study. 2 ary for variou
he students' needs of descriptions, and the course extends odXAP3 the AP3 course is to communication ski also preparing a p 04XAPZK the course content in the three AP of 04XCESM1 the course is focus	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing boroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to ap courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stus social situations.  Czech for Foreigners - Intermediate 2	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's fiel Z udent's vocabula	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2
he students' needs of descriptions, and the course extends odXAP3 the AP3 course is to communication ski also preparing a p 04XAPZK the course content in the three AP of 04XCESM1 the course is focus	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing poroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stuscial situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading the students is supposed to demonsena. It practices writing, speaking, and reading the students is supposed in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading the students is supposed in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading the students is coursed in CESM1 and is then focused on more difficult grammar phenome	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's fiel Z udent's vocabula	According t various type ng materials sentence ar 2 al and writte d, if possible and written 4 doge obtaine d of study. 2 ary for variou 2
ne students' needs of descriptions, and 'he course extends 'he AP3 course is t communication ski also preparing a p 04XAPZK 'he course content in the three AP of 04XCESM1 'he course is focus 04XCESM2 The course develop	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically a the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes a fundamental notions, agreement, and objections; taking part in discussion, note-taking; summarizing, writing boroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stus social situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula Z g skills and train:	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studer
he students' needs of descriptions, and 'he course extends 'he AP3 course is to communication ski also preparing a p 04XAPZK 'he course content in the three AP 04XCESM1 'he course is focus 04XCESM2 The course develop 04XCESM3	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically a the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writing paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing boroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to ap courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stus social situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula Z g skills and train: Z	According t various type ng materials sentence ar 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studer 2
ne students' needs of descriptions, and 'he course extends 'he AP3 course is to communication ski also preparing a p 04XAPZK 'he course content in the three AP 04XCESM1 'he course is focus 04XCESM2 The course develop 04XCESM3	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically a the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes a fundamental notions, agreement, and objections; taking part in discussion, note-taking; summarizing, writing boroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stus social situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula Z g skills and train: Z	According t various type ng materials sentence ar 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studer 2
he students' needs of descriptions, and the course extends 04XAP3 The AP3 course is the communication skit also preparing a p 04XAPZK The course content in the three AP of 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically a the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writing paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Deased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing boroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to ap courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stus social situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula Z g skills and train: Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2
he students' needs of descriptions, and the course extends 04XAP3 The AP3 course is the communication skit also preparing a p 04XAPZK The course content in the three AP of 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course reference	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Dased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing boroject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to agrecurses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic form t Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the students succial situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula Z g skills and train: Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2
he students' needs of descriptions, and the course extends 04XAP3 The AP3 course is the communication ski also preparing a p 04XAPZK The course content in the three AP of 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course re 04XCESMZK	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically a the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writir paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Dased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing broject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the structure is subtractions.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills.	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula g skills and train: Z Ily focused on st ZK	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 d of study. 2 ary for variou 2 s the studen 2 ylistics and
he students' needs of descriptions, and 'he course extends 'he AP3 course is to communication ski also preparing a p 04XAPZK 'he course content in the three AP 04XCESM1 'he course is focus 04XCESM2 The course develop 04XCESM3 The last course re 04XCESMZK	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writtin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 aased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes for a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from t Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the structure is subtraviated words, and materiate area formulas.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills.  Czech for Intermediate Student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills.	ches of science. functions (e.g., y more demandii ng including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula g skills and train: Z Ily focused on st ZK	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 d of study. 2 ary for variou 2 s the studen 2 ylistics and
he students' needs of descriptions, and the course extends The AP3 course is b communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESMZK The course content	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writting paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 aased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It incluses on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from text social situations.  Czech for Foreigners - Intermediate 1 evises morphological topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student is writing skills.  Czech for Intermediate Students Examination it is the examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the CESM be taken after successful completion of the 3 courses. Detailed information is to be obtained from the teacher.	ches of science. functions (e.g., y more demandii ig including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula g skills and trains Z Illy focused on st ZK M1,2,3 courses a	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 ylistics and 4 and can only
he students' needs of descriptions, and the course extends 04XAP3 The AP3 course is to communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course ro 04XCESM2K The course conter 04XCESM2K	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 pased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It incluses and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from t Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the structure in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 2 pos the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills.  Czech for Intermediate Students Examination t is the examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of	ches of science. functions (e.g., y more demandii ig including the s Z ludes training or an abstract) and age both in oral Z Deply their knowle he student's field Z udent's vocabula g skills and trains Z Illy focused on st ZK M1,2,3 courses a Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 ylistics and 4 and can only 2
he students' needs of descriptions, and 'he course extends 'he AP3 course is b communication ski also preparing a p 04XAPZK 'he course content in the three AP 04XCESM1 'he course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM3 The last course r 04XCESP1 'he prerequisite of	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically, is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 pased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the student is understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Intermediate Students Examination it is the examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the CZES be taken after successful completion of the 3 courses. Detailed information is to be obtained from the teacher.  Czech for Foreign Students - Advanced 1 the course is very good knowledge of the Czech language, i.e., comm	ches of science. functions (e.g., y more demandii g including the s Z ludes training or an abstract) and age both in oral ZK opply their knowle he student's field Z udent's vocabula g skills and trains Z lly focused on st ZK M1,2,3 courses a C	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 ylistics and 4 and can only 2 of Reference
he students' needs of descriptions, and the course extends The course extends The AP3 course is to communication ski also preparing a p 04XAPZK The course content in the three AP of 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM2K The course contert 04XCESP1 The prerequisite of It is focused partly	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 based on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes fundamental notions; taking part in discussion, note-taking; summarizing, writing broject on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from t Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the student in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills.  Czech for Foreign Students Examination t is the examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the CEST be taken after successful completion of the 3 courses. Detailed informal skills.  Czech for Foreign Student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills.  Czech for Foreign Student's knowledge of more alfine klip skills.  Czech for Foreign	ches of science. functions (e.g., y more demandii ig including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula g skills and trains Z Illy focused on st ZK M1,2,3 courses a C ean Framework on ce. Students and	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 ylistics and 4 and can only 2 of Reference re taught the
he students' needs of descriptions, and the course extends (04XAP3) The AP3 course is to communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM2K The course contert 04XCESP1 The prerequisite of It is focused partly	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writir paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 aased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes fundamental notions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to at social situations.  Czech for Foreigners - Intermediate 1 et on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the student is understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing shills.  Czech for Foreign Students Examination is the examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the CZES be taken after successful completion of the 3 courses. Detailed information is to be obtained from the teacher. Czech for Foreign S	ches of science. functions (e.g., y more demandii ig including the s Z ludes training or an abstract) and age both in oral ZK oply their knowle he student's field Z udent's vocabula g skills and trains Z Illy focused on st ZK M1,2,3 courses a C ean Framework on ce. Students and	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 d of study. 2 ary for variou 2 s the studer 2 ylistics and 4 and can only 2 of Reference re taught the
he students' needs of descriptions, and the course extends of AP3 course is b communication ski also preparing a p 04XAPZK The course content in the three AP of 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM3 The last course r 04XCESP1 The course conter 04XCESP1 The prerequisite of It is focused partly basics of function	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 Dased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It incluses on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a courses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the student is undeveloping the student's knowledge of more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills.  Czech for Foreign Student's writing skills.  Czech for Foreign Student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills.  Czech for Foreign Student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the	ches of science. functions (e.g., ' y more demandii ig including the s Z ludes training or an abstract) and age both in oral ZK opply their knowle he student's field Z udent's vocabula g skills and trains Z ly focused on st ZK M1,2,3 courses a courses a tudent Life. Writt	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 ylistics and 4 and can only 2 of Reference re taught the ien practice
he students' needs of descriptions, and the course extends of AP3 course is b communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM2K The course conter 04XCESP1 The prerequisite of It is focused partly basics of function 04XCESP2	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writing paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 aased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It ind is and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from t Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the structures in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especia lexicology and on developing the student's writing skills. Czech for Foreigners - Lintermediate 3 ti set examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the CESI be taken after successful completion of the 3 courses. Detailed information is to be obtained from the teacher. Czech for Foreigners - Lintermediate 3 evises morphological topics covered larger and extends the student's knowledge of more difficult language phenomen	ches of science. functions (e.g., ' y more demandii rg including the s Z ludes training or an abstract) and age both in oral Z py their knowle he student's field Z udent's vocabula g skills and trains Z g skills and trains Z lly focused on st Z ean Framework ( nce. Students ar tudent Life. Writt Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dge obtaine d of study. 2 ary for variou 2 s the studer 2 ylistics and 4 and can only 2 of Reference re taught the ien practice 2
he students' needs of descriptions, and the course extends The AP3 course is b communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM2K The course conter 04XCESP1 The prerequisite of It is focused partly basics of function 04XCESP2	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 assed on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from t Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stuscial situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more allificult language phenomena. It is especia lexicology and on developing the student's knowledge of more allificult anguage phenomena. It is especia lexicology and on developing the student's knowledge of the cozers all the topics of the CESM be taken after successful completion of the 3 courses. Detailed information is to be obtained from the teacher. Czech for Foreign Students - Advanced 1 the course is very good knowledge of the Czech language, i.e., communicative competences at least at level B2 of the Common Europ o	ches of science. functions (e.g., ' y more demandii rg including the s Z ludes training or an abstract) and age both in oral Z py their knowle he student's field Z udent's vocabula g skills and trains Z g skills and trains Z lly focused on st Z ean Framework ( nce. Students ar tudent Life. Writt Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 s the studen 2 ylistics and 4 and can only 2 of Reference re taught the ien practice 2
he students' needs of descriptions, and the course extends 04XAP3 The AP3 course is b communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM2K The course conter 04XCESP1 The prerequisite of It is focused partly basics of function 04XCESP2 This course extend	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 abased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a gocurses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to social situations.  Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stuscical situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especial lexicology and on developing the student's writing skills.  Czech for Foreign Student's knowledge of the covers al thet topics of the CESM be taken aft	ches of science. functions (e.g., ' y more demandii rg including the s Z ludes training or an abstract) and age both in oral ZK opply their knowle he student's field Z udent's vocabula g skills and trains Z ly focused on st ZK M1,2,3 courses a can Framework a nce. Students and tudent Life. Writt Z pecialist texts pl	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 s the studen 2 ylistics and 4 and can only 2 of Reference re taught the ien practice 2 acing greate
he students' needs of descriptions, and the course extends 04XAP3 The AP3 course is b communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM2K The course conter 04XCESP1 The prerequisite of It is focused partly basics of function 04XCESP2	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically is the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 assed on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from t Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stuscial situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more allificult language phenomena. It is especia lexicology and on developing the student's knowledge of more allificult anguage phenomena. It is especia lexicology and on developing the student's knowledge of the cozers all the topics of the CESM be taken after successful completion of the 3 courses. Detailed information is to be obtained from the teacher. Czech for Foreign Students - Advanced 1 the course is very good knowledge of the Czech language, i.e., communicative competences at least at level B2 of the Common Europ o	ches of science. functions (e.g., ' y more demandii rg including the s Z ludes training or an abstract) and age both in oral Z py their knowle he student's field Z udent's vocabula g skills and trains Z g skills and trains Z lly focused on st Z ean Framework ( nce. Students ar tudent Life. Writt Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 s the studen 2 ylistics and 4 and can only 2 of Reference re taught the ien practice 2
he students' needs of descriptions, and the course extends The AP3 course is b communication ski also preparing a p 04XAPZK The course content in the three AP 04XCESM1 The course is focus 04XCESM2 The course develop 04XCESM3 The last course r 04XCESM2K The course conter 04XCESP1 The prerequisite of It is focused partly basics of function 04XCESP2 This course extend 04XCESP3	s it concentrates on chosen grammar topics, but mainly intends to develop understanding of syntactic structures and typical rhetorical d, if possible, a case study). Increasing emphasis is placed on the undergraduate's independent work with and reading of linguistically as the student's subtechnical vocabulary, and includes fundamental notions of chosen branches of science. It is focused on formal writin paragraph structure, linking, cohesion and coherence in texts.  English for Advanced Students P3 abased on AP2 and expects the student to work without any guidance with authentic professional materials and to interpret the text. It includes and functions (e.g., expressing an opinion, agreement, and objections; taking part in discussion, note-taking; summarizing, writing project on a given or chosen topic and presenting it. The course places emphasis on distinguishing levels of formal and informal langu communication.  English for Advanced Students Examination is the examination as given by the study plan. The student is supposed to demonstrate mastering the AP3 syllabus and the ability to a gocurses. The examination consists of 2 parts - written (100 min) and oral (30 min) and includes also oral presentation of a topic from to social situations.  Czech for Foreigners - Intermediate 1 ed on correct pronunciation, important morphological phenomena, prepositional phrases, and verb forms as well as on extending the stuscical situations.  Czech for Foreigners - Intermediate 2 ps the topics covered in CESM1 and is then focused on more difficult grammar phenomena. It practices writing, speaking, and reading in understanding common abbreviations, abbreviated words, and mathematical terms and formulas.  Czech for Foreigners - Intermediate 3 evises morphological topics covered earlier and extends the student's knowledge of more difficult language phenomena. It is especial lexicology and on developing the student's writing skills.  Czech for Foreign Student's knowledge of the covers al thet topics of the CESM be taken aft	ches of science. functions (e.g., ' y more demandii rg including the s Z ludes training or an abstract) and age both in oral Z py their knowle he student's field Z udent's vocabula Z g skills and trains Z lly focused on st Z ean Framework ( nce. Students and tudent Life. Writt Z pecialist texts pl Z	According t various type ng materials sentence an 2 al and writte d, if possible and written 4 dof study. 2 ary for variou 2 s the studen 2 s the studen 2 ylistics and 4 and can only 2 of Reference re taught the ien practice 2 acing greate

04XCESPZK Czech for Foreign Students - Advanced Examination	ZK	4
The course content is the examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the CE	SP1,2,3 courses ar	nd can only
be taken after successful completion of the 3 courses. Detailed information is to be obtained from the teacher.		
04XCESZ1 Czech for Foreigners - Beginners 1	Z	2
The course is designed for students of the English programme. Students will become acquainted with the main characteristics of Czech (phonetic and	- ·	-
acquire basic language and speaking skills. The course focuses on pronunciation exercises, simple social phrases, and oral and written communication	n in the most comm	on everyday
situations. The course covers roughly lessons 1-3 of eština Express (Czech Express) by L. Holá and P. Bo ilová.		
04XCESZ2 Czech for Foreigners - Beginners 2	Z	2
The language and communication competences acquired in CESZ1 are further developed. Students deepen their knowledge of the declension and co	onjugation system a	and practise
basic communication topics. The course covers roughly lessons 3-5 in Czech Express by L. Holá and P. Bo ilová.	7	2
04XCESZ3 Czech for Foreigners - Beginners 3		2
The course further develops the language and communication competences acquired in the XCESZ1 and XCESZ2 courses. The teaching focuses or fixing correct pronunciation and deepening grammar, features through practice, as well as introducing the Czech culture. Students are asked to produce		-
frequent types of dialogue. They also practise understanding texts in terms of main ideas or looking for specific details in texts. The course covers roughl	-	
04XCESZZK Czech for Foreigners Beginners - Examination	ZK	4
The course content is the examination as given by the study plan. The examination consisting of a written and oral part covers all the topics of the 04.		
only be taken after successful completion of all three courses. Detailed information is to be obtained from the teacher.		
04XFM1 French for Intermediate Students M1	Z	2
French - intermediate FM The objective of this three-semester course is to improve and further develop communication in the French language in both	1	1
will be able to communicate in social interaction and in academic, scientific and professional environment. They will be able to use the language to tr		
information and to solve problems. FM1 The course builds on and further develops linguistic competence acquired at secondary school. It revises, syst	emizes and expand	ds language
skills gained in previous study. The following topics are covered: University studies in our country and in France, writing of transactional letters, CV, perso	onal statement, requ	uest, answer
to an advert, French culture and geography, Paris. Topics of specialization: mathematics, physics. Reading technical and popular science texts, w	ork based on these	e texts.
04XFM2 French for Intermediate Students M2	Z	2
Course FM2 builds on FM1. Linguistic structures and competence acquired in previous study are systemized and expanded. Reading popular science tex	kts, features typical	for technical
and scientific language (passives, nominalization, word formation). Topics: physics, power engineering, environment, Internet, success of French sciences and scientific language (passives, nominalization, word formation).	ence and technolog	gy, French
scientists, artists and architects. Description of an object, device, shapes, dimensions, material.		
04XFM3 French for Intermediate Students M3	Z	2
The course is focused on improvement and further development of linguistic competence acquired during the follow-up courses. Syntactic structures (su		
participle structures, compound tenses). Text summaryStudents prepare a written paper which will be delivered in form of an oral presentation in-cla		
field of students' future specialisation or to their interest and generally covers a technical /applied science topic. It is not a translation but a creative wor	-	
and one's own knowledge/experienceLonger monologues on topics /situations set for the examination are prepared. Text structure, cohes		
04XFMZK French for Intermediate Students Examination	ZK	4
The content is the examination as given by the study programme. The whole French programme is ended with an examination covering the contents of a written and eral and is arranged examples to Evanigation lastructions and evaluate the study of the study		xamination
consists of a written and oral part and is organized according to Examination Instructions, a document available on the we	2D.	
04VED1 Erangh far Advanged Studente D1		2
04XFP1 French for Advanced Students P1	Z	2
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write	Z Z	Students will
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writin be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit generation and in academic scientific and work environment.	Z ten and oral form. S al and technical info	Students will
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repe	Z ten and oral form. S al and technical info eated and expanded	tudents will brmation and d: subjonctif,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repe passé composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I	Z ten and oral form. S al and technical info eated and expanded etters, CV, persona	Students will ormation and d: subjonctif, al statement,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repe	Z ten and oral form. S al and technical info eated and expander etters, CV, persona of specialization: n	Students will ormation and d: subjonctif, al statement,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repr passé composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics	Z ten and oral form. S al and technical info eated and expander etters, CV, persona of specialization: n	Students will ormation and d: subjonctif, al statement,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation	Z ten and oral form. S al and technical info eated and expanded etters, CV, persona of specialization: m on. Z	Students will ormation and d: subjonctif, al statement, nathematics,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit generat to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are reperpassed compose-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of 4XFP2         O4XFP2       French for Advanced Students P2	Z ten and oral form. S al and technical info eated and expanded etters, CV, persona of specialization: m on. Z	Students will ormation and d: subjonctif, al statement, nathematics,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit generat to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are reperpassed compose-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of 94XFP2         Vith the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on generating popular science texts.	Z ten and oral form. S al and technical info eated and expanded etters, CV, persona of specialization: m on. Z	Students will ormation and d: subjonctif, al statement, nathematics,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit general to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).	Z ten and oral form. S al and technical info eated and expanded etters, CV, persona of specialization: m on. Z given topics. Featur	Students will prmation and d: subjonctif, al statement, nathematics, 2 res typical of 2
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit general to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         O4XFP2       French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanded Students P3	Z       ten and oral form. S       al and technical info       pated and expanded       etters, CV, personal       of specialization: m       provide       Z       given topics. Featur       Z       ogineering environm	Students will prmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit generat to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         O4XFP2       French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanded Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in error	Z       ten and oral form. S       al and technical info       pated and expanded       etters, CV, personal       of specialization: m       provide       Z       given topics. Featur       Z       ogineering environm	Students will prmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit generat to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         O4XFP2       French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanded Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cover	Z       ten and oral form. S       al and technical info       pated and expanded       etters, CV, personal       of specialization: m       provide       Z       given topics. Featur       Z       ogineering environm	Students will prmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit general to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are report passé composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanded Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFPZK       French for Advanced Students Examination         04XFPZK       French for Advanced Students Examination	Z       ten and oral form. S       al and technical info       eated and expanded       etters, CV, personal       of specialization: m       m.       Z       given topics. Featur       gineering environm       rs a technical /appl       ZK       and is organized and	Students will prmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit general to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on generalized and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanded Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFPZK       French for Advanced Students Examination         04XFPZK       French for Advanced Students Examination         04XFPZK       French for Advanced Students Examination	Z       ten and oral form. S       al and technical info       eated and expanded       etters, CV, persona       of specialization: m       n.       Z       given topics. Featur       gineering environm       rs a technical /appl       ZK       and is organized ar       rading.	Students will prmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit general to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are report passé composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanded Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFPZK       French for Advanced Students Examination         04XFPZK       French for Advanced Students Examination	Z       ten and oral form. S       al and technical info       eated and expanded       etters, CV, personal       of specialization: m       m.       Z       given topics. Featur       gineering environm       rs a technical /appl       ZK       and is organized and	Students will prmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit generat to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressé composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of 4XFP2         O4XFP2       French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific computed linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFPZK       French for Advanced Students Examination         04XFPZ       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication.         04XFP3       French for Advanced Students Examination<	Z       ten and oral form. S       al and technical info       eated and expanded       etters, CV, persona       of specialization: m       of specialization: K       given topics. Featur       Z       igineering environm       z at cchnical /appl       ZK       and is organized arrading.       Z       zailizing and in profi	Students will rrmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4 ccording to 2 essional life.
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit general to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressé composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP2       French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on etechnical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanded Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFPZK       French for Advanced Students Examination <td>Z       ten and oral form. S       al and technical info       eated and expanded       etters, CV, persona       of specialization: m       n.       Z       given topics. Featur       Z       ingineering environm       ZK       and is organized arrading.       Z       zializing and in profito communicate at</td> <td>Students will rrmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4 ccording to 2 essional life. elementary</td>	Z       ten and oral form. S       al and technical info       eated and expanded       etters, CV, persona       of specialization: m       n.       Z       given topics. Featur       Z       ingineering environm       ZK       and is organized arrading.       Z       zializing and in profito communicate at	Students will rrmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4 ccording to 2 essional life. elementary
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit generat to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressée composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on the chinical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cover topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for are avaination.         04XFP2K       French for Advanced Students Examination         04XFPZK       French for Advanced Students Examination         04XFPZ       French for Advanced Students Examination consists of a written and/or an oral part s	Z         ten and oral form. S         al and technical info         eated and expanded         etters, CV, persona         of specialization: m         on.         Z         given topics. Featur         Z         rsgineering environm         Z         and is organized arrading.         Z         cializing and in profito communicate at dová, French for be	Students will rrmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4 ccording to 2 essional life. elementary eginners
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit general to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressé composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         Vith the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on extending and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFP2K       French for Advanced Students Examination         04XFP2K       French for Advanced Students Examination in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Prep	Z         ten and oral form. S         al and technical info         eated and expanded         etters, CV, personal         of specialization: m         n.         Z         given topics. Featur         Z         ingineering environmers a technical /appl         ZK         and is organized arrading.         Z         cializing and in profito communicate at dová, French for beersonal information	Students will rrmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4 ccording to 2 essional life. elementary eginners n, asking and
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit generat to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are represses compose-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of etchnical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP2       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in ersis is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFP2K       French for Advanced Students P3         The whole French program is ended with an examination covering the contents of FP1-FP3. The examination consists of a written and/or an oral part Examination Instructions, a document available on the web. Assessment of the presentation is included into the examination go 04XFP2I         French for Advanced Students EXAMINATION       French for Beginners Z1         French for Beginners Z1       French for Beginners Z1         <	Z         ten and oral form. S         al and technical info         eated and expanded         etters, CV, personal         of specialization: m         of         given topics. Featur         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized arrading.         Z         cializing and in profito communicate at dová, French for beersonal information unciation and gram	Students will         rmation and         subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         lied science         4         ccording to         2         essional life.         elementary         aginners         , asking and         mar.
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanded Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in erskill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cover topic. It is a creative work compiled from 3 French sources. Preparation onsists of a written and/or an oral part Examination Instructions, a document available on the web. Assessment of the presentation is included into the examination are strassed for popular science and scientific texts. F21 The objective of this 5-level course is to be able to communicate in French orally and in writing in situations of ev	Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         of         given topics. Featur         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized arrading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z	Students will       rmation and       d: subjonctif,       al statement,       nathematics,       2       res typical of       2       nent. Special       ied science       4       ccording to       2       essional life.       elementary       aginners       , asking and       mar.       2
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed compose-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation 04XFP2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on a technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFP2K       French for Advanced Students Examination         04XFP2K1       French for Advanced Students Examination consists of a written and/or an oral part examination Instructions, a document available on the w	Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         of         given topics. Featur         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized arrading.         Z         cializing and in profito communicate at dová, French for beersonal information unciation and gram         Z         atxtion and gram         Z         atxtion and gram	Students will         rmation and         subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         ied science         4         ccording to         2         essional life.         elementary         aginners         , asking and         mar.         2         - Pravdová :
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repre- passé composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretatic O4XFP2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFP2K       French for Advanced Students Examination         The wole French program is ended with an examination covering the contents of FP1-FP3. The examination consists of a written and/or an oral part Examination Instr	Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         of         given topics. Featur         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized arrading.         Z         cializing and in profito communicate at dová, French for beersonal information unciation and gram         Z         atextbook: Pravda - ent - disagreement	Students will         rmation and         subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         ied science         4         ccording to         2         essional life.         elementary         aginners         , asking and         mar.         2         - Pravdová :         , apology,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repre- passé composé-impariati, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional 1 request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretatic 04XFP2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic completence, skills and knowledge, and their use for communication in err skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for and examination.         04XFP2K       French for Advanced Students Examination consists of a written and/or an oral part Examination Instructions, a document available on the web. Assessment of the presentation is included into the examination go (4XFP1      <	Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         of         given topics. Featur         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized arrading.         Z         cializing and in profito communicate at dová, French for beersonal information unciation and gram         Z         atextbook: Pravda - ent - disagreement	Students will         rmation and         subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         ied science         4         ccording to         2         essional life.         elementary         aginners         , asking and         mar.         2         - Pravdová :         , apology,
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genera to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repre- passé composé-impartait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional 1 request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretatic <b>04XFP2</b> French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication or technical and scientific communication are stressed (passive voice, nominalization, word formation). <b>04XFP3</b> French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work commiglied from 3 French sources. Preparation of several set topics for oral examination. <b>04XFP2K</b> French for Advanced Students Examination consists of a written and/or an oral part Examination Instructions, a document available on the web. Assessment of the presentation is included in the examination go the course includes	Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         info         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized arrading.         Z         cializing and in profit         to communicate at         dová, French for be         ersonal information         unciation and gram         Z         at textbook: Pravda -         ent - disagreement         ication. Specific top	Students will         rmation and         d: subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         ied science         4         ccording to         2         essional life.         elementary         aginners         , asking and         mar.         2         - Pravdová :         , apology,         pics covered:
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genere to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are reprepased composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of section and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFP2K       French for Advanced Students Examination         The whole French for specific / technical communication is included into the examination.       04XFP2         Vertex is a creative work compiled from 3 French sources. Preparation of several set topics for an oral part Examination Instructions, a document available on the web. Assessment of the presentation is inclu	Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         of specialization: r         nn.         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized ar         rading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z         e textbook: Pravda -         ent - disagreement         ication. Specific top         Z	Students will         rmation and         subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         ied science         4         ccording to         2         essional life.         elementary         eginners         , asking and         mar.         2         - Pravdová :         , apology,         jisc covered:         2
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genere to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are represed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional I request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics interret, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretatic 04XFP2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on a technical and scientific communication are stressed (passive voice, norminalization, word formation).         04XFP3       French for Advanded Students P3         The course is focused on systemization and improvement of acquired inguistic competence, skills and knowledge, and their use for communication in er skill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFP2K       French for Advanced Students Examination in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for and and papt and making oral presentation is included into the e	Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         of         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized ar         rading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z         e textbook: Pravda -         ent - disagreement         ication. Specific top         Z         avdová: French for	Students will         rmation and         d: subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         ied science         4         ccording to         2         essional life.         elementary         eginners         , asking and         mar.         2         - Pravdová :         , apology,         sics covered:         2         Beginners.
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genere to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are represented to an advert, environment laisues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP2       French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication.         04XFPZK       French for Advanced Students P3         The work with the science is a course to the anguage). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFPZK       French for Advanced Students EX         04XFFZI       French for Beginners Z1 <td>Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         of         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized ar         rading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z         e textbook: Pravda -         ent - disagreement         ication. Specific top         Z         avdová: French for</td> <td>Students will         rmation and         d: subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         ied science         4         ccording to         2         essional life.         elementary         eginners         , asking and         mar.         2         - Pravdová :         , apology,         sics covered:         2         Beginners.</td>	Z         ten and oral form. S         al and technical info         sated and expanded         etters, CV, personal         of specialization: m         of         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized ar         rading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z         e textbook: Pravda -         ent - disagreement         ication. Specific top         Z         avdová: French for	Students will         rmation and         d: subjonctif,         al statement,         nathematics,         2         res typical of         2         nent. Special         ied science         4         ccording to         2         essional life.         elementary         eginners         , asking and         mar.         2         - Pravdová :         , apology,         sics covered:         2         Beginners.
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both write be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genere to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repressed composé-imparfait, pronouns. The following specific topics are covered: University studies in our country and in France, writing of transactional internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of the technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP2       French for Advanced Students P3         The course builds on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication in erskill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cover topic: It is a creative work compiled from 3 French for Advanced Students P3         The whole French program is ended with an examination covering the contents of FP1-FP3. The examination consists of a written and/or an oral part Examination Instructions, a document available on the web. Assessment of the presentation is included into the examination and reading of popular science action and writing in situations of everyday life, in social includes French for specific / technical communication and functions from the textbook Espaces I, lessons 1-4: introductions, prigring the directors, simple instructions and questions. Special attention is paid to pronunciation. Spelling is explained in connection with pronuciation	Z         ten and oral form. S         and technical info         sated and expanded         etters, CV, personal         of specialization: m         of specialization: r         in.         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized ar         rading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z         atextbook: Pravda -         ent - disagreement         ication. Specific top         Z         avdová: French for for	Atudents will rrmation and d: subjonctif, al statement, nathematics, 2 res typical of 2 nent. Special lied science 4 ccording to 2 ressional life. elementary eginners , asking and mar. 2 - Pravdová : , apology, bics covered: 2 Beginners. as part of
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language in both writt be able to communicate in social interaction and in academic, scientific and work environment. They will be able to use the language to transmit genere to solve problems. FP1 The course builds on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are represented to an advert, environment laisues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP2       French for Advanced Students P2         With the link to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on technical and scientific communication are stressed (passive voice, nominalization, word formation).         04XFP3       French for Advanced Students P3         The course is focused on systemization and improvement of acquired linguistic competence, skills and knowledge, and their use for communication.         04XFPZK       French for Advanced Students P3         The work with the science is a course to the anguage). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French sources. Preparation of several set topics for oral examination.         04XFPZK       French for Advanced Students EX         04XFFZI       French for Beginners Z1 <td>Z         ten and oral form. S         and technical info         sated and expanded         etters, CV, personal         of specialization: m         of specialization: r         in.         Z         given topics. Featur         Z         ingineering environm         rs a technical /appl         ZK         and is organized ar         rading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z         avdová: French for be         ent - disagreement         ication. Specific top         Z         avdová: French for         formation and loud</td> <td>Atudents will rrmation and d: subjonctif, at statement, nathematics, 2 res typical of 2 res typical of 2 nent. Special ied science 4 ccording to 2 ressional life. elementary eginners a, asking and mar. 2 - Pravdová : , apology, bics covered: 2 Beginners. as part of 2</td>	Z         ten and oral form. S         and technical info         sated and expanded         etters, CV, personal         of specialization: m         of specialization: r         in.         Z         given topics. Featur         Z         ingineering environm         rs a technical /appl         ZK         and is organized ar         rading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z         avdová: French for be         ent - disagreement         ication. Specific top         Z         avdová: French for         formation and loud	Atudents will rrmation and d: subjonctif, at statement, nathematics, 2 res typical of 2 res typical of 2 nent. Special ied science 4 ccording to 2 ressional life. elementary eginners a, asking and mar. 2 - Pravdová : , apology, bics covered: 2 Beginners. as part of 2
FP advanced course The objective of this three-semester course is to improve and further develop communication in the French language to transmit general to solve problems. FP1 The course builts on and further develops linguistic competence acquired at secondary school. Difficult grammar topics are repry passé composé-imparfait, pronours. The following specific topics are covered: University studies in our country and in France, writing of transactional i request, answer to an advert, environmental issues, success of French science and technology, chosen topics from French regional culture, Paris. Topics internet, physics, chemistry. Reading of technical and popular science texts, further work with these texts and interpretation of the time to P1 contents, the course further develops language skills. Focus is put on reading popular science texts and on oral communication on generalization and improvement of acquired inguistic competence, skills and knowledge, and their use for communication or generalization of systemization and improvement of acquired inguistic competence, skills and knowledge, and their use for communication in erskill - translation of shorter texts (both from and into the language). Writing of a paper and making oral presentation in-class. The paper generally cove topic. It is a creative work compiled from 3 French for Advanced Students Examination         O4XFPZK       French for Advanced Students Examination         The whole French program is ended with an examination covering the contents of FP1-FP3. The examination consists of a written and/or an oral part Examination instructions, a document available on the web. Assessment of the presentation is included into the examination for the examination or specific / technical communication and functions from the textbook Espaces 1. Proc. 1 the extbook Pravda – Prav (Francouzšina pro za áte ky). It is extended with situations of communication and functi	Z         ten and oral form. S         and technical info         sated and expanded         etters, CV, personal         of specialization: m         of specialization: r         in.         Z         given topics. Featur         Z         gineering environm         rs a technical /appl         ZK         and is organized ar         rading.         Z         cializing and in profito         communicate at         dová, French for be         ersonal information         unciation and gram         Z         avdová: French for be         ent - disagreement         ication. Specific top         Z         avdová: French for         formation and loud         Z         avdová: French for	Atudents will rrmation and d: subjonctif, at statement, nathematics, 2 res typical of 2 res typical of 2 nent. Special ied science 4 ccording to 2 ressional life. elementary eginners asking and mar. 2 - Pravdová : , apology, bics covered: 2 Beginners. as part of 2 covered with

	The course covers generals and specific topics: health- illness, sport, free time, environment, study, travelling in France, Paris, shopping, we country and in France, how to write CV, application, topics in mathematics, reading physics - mechanics, informatics, internet.	eather, univers	sity in our
04XFZ5	French for Beginners Z5	Z	2
	red in FZ4 are further developed, as well as technical language. Students prepare a paper on a chosen popular science topic. They present	1	
	is covered by lessons 24 - 26 of the textbook: Pravda-Pravdova, French for Beginners, and is complemented from other materials. Topics: o	-	
•	of French science and technology, information about France. Grammar is systemized and complemented with syntax (subordinate clauses,		
	subjunctive clauses, gerund, passive.	,	
04XFZZK	French for Beginners Examination	ZK	3
	examination as given by the study plan. The course is terminated with an examination consisting of oral and written part. The examination is	1	
	Instruction for examination. Its content covers the levels FZ1 - FZ5.	,	
04XNM1	German for Intermediate Students M1	Z	2
-	e course is to level off the students' skills in the German language. The course focuses on revision of more difficult phenomena and structure	- 1	_
-	processes (e.g. importance of verb prefixes). In the lexical part, it covers topics referring to higher education in both the Czech Republic an		
	sues together with all necessary expressions and phrases, expressions and phrases needed to chemists, mathematicians, physicists, and the	-	
	terminology. It develops communication on related topics and is aimed at correct pronunciation, grammatical correctness and understandat		
04XNM2	German for Intermediate Students M2	Z	2
	ces other more complex grammatical structures and their application in communication based on technical texts, such as the relation between		
	beginning of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and car tec		
	information and reading aloud, and appropriate language for various purposes in oral and written communication. The course systematically re		
<b>j</b>	phenomena important for professional discourse (participles, relative clauses).	5	
04XNM3	German for Intermediate Students M3	Z	2
	ces other more complex grammatical structures and their application in communication based on technical texts, such as the relation between	- 1	
	beginning of the 21st century, linguistically more demanding texts on the environment, the language of mathematics, computers and car tec		
	r information and reading aloud, and appropriate language for various purposes in oral and written communication. The course systematically re		
	phenomena important for professional discourse (participles, relative clauses).		
04XNMZK	German for Intermediate Students Examination	ZK	4
-	t is the examination as given by the study plan. The whole German for Intermediate Students Course is completed by an examination consist		ts - writte
	over the courses NM1 - NM3. The oral part follows after passing the written part successfully and after obtaining the 04NM3 assessment. Mo		
	is to be obtained from the teacher.		
04XNP1	German for Advanced Students P1	Z	2
	res good grammar knowledge, extended general vocabulary, and good communication skills acquired at secondary school to be levelled off		
-	se is then focused on working with technical and scientific texts and practising reading techniques (skimming, scanning, reading for detail). I	-	-
	nar structures necessary for understanding a subtechnical text (passive voice, participles, participle structures) and it also focuses on practical e		
noro annoar grann	i.e., telephoning.		namoado
04XNP2	German for Advanced Students P2	7	2
-	bs the students' skills in working with professional scientific texts (understanding, summarising, note-taking, interpreting) while extending their g	- 1	_
-	t introduces mathematical expressions and texts of nuclear power engineering. Increasing emphasis is placed on understanding and practising		
	oth written and oral (CV, letter of application, interview, scholarship), and more complex grammatical structures (i.e., subjunctive, indirect sp	-	lanicatio
04XNP3	German for Advanced Students P3	7	2
	sts of 3 main parts (general communicative situations, grammar and technical topics). Students will develop their vocabulary in a variety of le	~	
	sio or o main parto (general commandativo situationo, grammar and technical tepico). Etadolito min develop their vecabalary in a valiety or k	ess common ·	
(traffic problems a	nd car accidents, accident report, filling in a form, complaints). Based on presentations and technical and subtechnical texts, the vocabulary		situation
	nd car accidents, accident report, filling in a form, complaints). Based on presentations and technical and subtechnical texts, the vocabulary represented to the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me	/ range in field	situation Is such a
nuclear power en	gineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me	/ range in field eans of a pres	situation Is such a entation
nuclear power en		/ range in field eans of a pres	situation Is such a entation
nuclear power er students are traine	regineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German.	/ range in field eans of a pres also includes	situation Is such a entation
nuclear power er students are traine 04XNPZK	agineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination	/ range in field eans of a pres also includes ZK	situation ds such a eentation translation
nuclear power er students are traine 04XNPZK The course conter	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination It is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting	v range in field eans of a pres also includes ZK	situation ds such a entation translatio 4 ts - writte
nuclear power er students are traine 04XNPZK The course conter	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisti cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded assess	v range in field eans of a pres also includes ZK	situation ds such a centation translatio 4 ts - writte
nuclear power er students are traine 04XNPZK The course conter and oral, which o	Agineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination at is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consistin cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher.	/ range in field eans of a pres also includes ZK   ing of two part ssment. More	situation ds such a centation translation 4 ts - writte detailed
nuclear power er students are traine 04XNPZK The course conter and oral, which o 04XRM1	Agineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination it is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consistin cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1	/ range in field eans of a pres also includes ZK   ing of two part ssment. More Z	situation ds such a eentation translatio 4 ts - writte detailed 2
nuclear power er students are traine 04XNPZK The course conter and oral, which c 04XRM1 The course is desig	Agineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination at is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and had	situation ds such a entation translati 4 ts - writte detailed 2 ndwritte
nuclear power er students are traine 04XNPZK The course conter and oral, which c 04XRM1 The course is design pasic vocabulary for	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both por communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and har ay and giving o	situation ds such a entation translatio 4 ts - writte detailed 2 ndwritter direction
nuclear power er students are traine 04XNPZK The course conter and oral, which c 04XRM1 The course is design pasic vocabulary for	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both por communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the was sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of sic grammar structures (verbal and nominal forms, irregular verbs, pronouns).	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and har ay and giving o	situation ds such a entation translatio 4 ts - writte detailed 2 ndwritter direction
nuclear power er students are traine 04XNPZK The course conter and oral, which o 04XRM1 The course is designasic vocabulary for they can use bac	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination at is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded assess information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the was sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable.	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and hat ay and giving of f the RZ2 cou	situation ds such a entation translati 4 ts - writte detailed 2 ndwritte direction rse. The
nuclear power er students are traine 04XNPZK The course conter and oral, which o 04XRM1 The course is desig basic vocabulary fo they can use bas 04XRM2	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination at is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consistin cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the was sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2	range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and hai ay and giving of f the RZ2 cou Z	situation ds such a entation translatio 4 ts - writte detailed 2 ndwritter directions
nuclear power er students are traine 04XNPZK The course conter and oral, which o 04XRM1 The course is desig obasic vocabulary fo they can use bac 04XRM2	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination at is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the was is grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time time time allotted in the time and scope correspond roughly to RZ4, however, for half of the time allotted in the time	v range in field eans of a pres also includes ZK Ing of two part ssment. More Z Drinted and hai ay and giving of f the RZ2 cou Z etable.	situation: ds such a eentation, translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2
nuclear power er students are traine 04XNPZK The course conter and oral, which o 04XRM1 The course is desig basic vocabulary fo they can use bas 04XRM2 04XRM3	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination it is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time Russian for Intermediate Students M3	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and hai ay and giving of f the RZ2 cou Z   etable. Z	situation: ds such a eentation, translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2 2
nuclear power er students are traine 04XNPZK The course conter and oral, which o 04XRM1 The course is desig pasic vocabulary fo they can use ba 04XRM2 04XRM3	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination it is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, for	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and hai ay and giving of f the RZ2 cou Z   etable. Z	situation ds such a eentation translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2 2
nuclear power er students are traine 04XNPZK The course conter and oral, which o 04XRM1 The course is desig pasic vocabulary fo they can use bar 04XRM2 04XRM2 04XRM3 The course develop	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consistin cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded assess information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, for in the timetable.	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and hai ay and giving of f the RZ2 coul Z   etable. Z   or half of the tir	situation: ds such a eentation, translatio 4 ds - writte detailed 2 ndwritter directions rse. The 2 2 me allotte
nuclear power er atudents are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design oasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consistin cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded assess information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, for in the timetable. Russian for Intermediate Students Examination	v range in field eans of a pres also includes ZK   ng of two part ssment. More Z   orinted and hai ay and giving of f the RZ2 cou Z   table. Z   or half of the tir ZK	situation: ds such a eentation, translatio 4 ds - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design oasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course conter	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wai is grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the timetable. Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, for in the timetable. Russian for Intermediate Students Examination t is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and sting the study plan. The course is completed by taking a written and oral examination testing the knowledge and the students examination as given by the study plan. The course is completed by tak	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   or inted and hat ay and giving of f the RZ2 coul Z   itable. Z   or half of the tir ZK   d skills acquire	situation: ds such a eentation, translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4 ed in RM
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design oasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course conter - RM3. Stud	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisting cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded assess information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the was sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, for in the timetable. Russian for Intermediate Students Examination tt is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and tents are eligible for the oral examination only after a prior pass in RM3 and a successful written examination. Students are given instruction is the tage of the oral examination only after a prior pass in	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   or inted and hat ay and giving of f the RZ2 cou Z   itable. Z   or half of the tir ZK   d skills acquir is by the teact	situations ds such a eentation, translatic 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4 ed in RM her.
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design pasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course develop 04XRM2K The course conter - RM3. Stuc 04XRP1	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consistit cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the was sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the time Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time Russian for Intermediate Students M3 pes the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, for in the timetable. Russian for Intermediate Students Examination tt is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and tents are eligible for the oral examination only after a prior pass in RM3 and a successful written examination. Students are given instruction Russian for Advanced Students P1	range in field eans of a pres also includes ZK ing of two part ssment. More Z orinted and had ay and giving of f the RZ2 cou Z otable. Z Z d skills acquir s by the teach Z	situation: ds such a eentation, translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 ne allotte 4 ed in RM her. 2
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design oasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course develop 04XRM2K The course conter - RM3. Stuc 04XRP1	Ingineering, the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisti cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time allotted in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, fo in the timetable. Russian for Intermediate Students Examination in the timetable. Russian for Intermediate Students Examination tis the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and tents are eligible for the oral examination only after a prior pass in RM3 and a successful written examination. Students are given instruction Russian for Advanced Students P1 uirement for the course is to achieve the B1 CEF	range in field eans of a pres also includes ZK ing of two part ssment. More Z orinted and had ay and giving of f the RZ2 cou Z otable. Z Z d skills acquir s by the teach Z	situation ds such a eentation translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4 ed in RM her. 2
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design pasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course conter - RM3. Stud 04XRP1 The entrance req	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisti prover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the was sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, fo in the timetable. Russian for Intermediate Students Examination tt is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and lents are eligible for the oral examination only after a prior pass in RM3 and a successful written examination. Students are given instruction returners, understanding the fundamentals of technical language and training writi	range in field eans of a pres also includes ZK   ing of two part ssment. More Z   or inted and hat ay and giving of f the RZ2 cou Z   otable. Z   or half of the tir ZK   d skills acquir s by the teach Z   more difficult	situation: ds such a eentation, translatio 4 detailed 2 ndwritter directions rse. The 2 2 ne allotte 4 ed in RM her. 2 grammar
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design pasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course conter - RM3. Stud 04XRP1 The entrance req 04XRP2	In the time table. In the time table. It is the examination as given by the study plan. The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time table. It is the examination as given by the study plan. The more than the time table. It is the examination as given by the study plan. The work and scope are roughly to RZ4, however, for half of the time allotted in the time table. It is the examination as given by the study plan. The work and scope are roughly to RZ4, however, for half of the time allotted in the time table. It is the examination as given by the study plan. The work and scope are roughly to RZ4, however, for half of the time allotted in the time table. It is the examination as given by the study plan. The work and the course is completed by the study plan. The work and the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course is to achieve the B1 CEFR level. The objective of the course i	range in field eans of a pres also includes ZK   ing of two part ssment. More Z   or inted and had ay and giving of f the RZ2 cou Z   otable. Z   or half of the tir ZK   d skills acquire ns by the teach Z   more difficult g	situation: ds such a eentation, translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4 ed in RM her. 2 grammar 2
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design pasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course conter - RM3. Stud 04XRP1 The entrance req 04XRP2	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The courses practice to and from German. German for Advanced Students Examination it is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consistii cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the RZ3 course, but for half of the time allotted in the time Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time Russian for Intermediate Students M3 pes the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, fo in the timetable. Russian for Intermediate Students Examination the timetable. Russian for Intermediate Students P1 uirrement for the course is to achieve the B1 CEFR level. The objective of the course is revision of standard language structures, practicing r structures, understanding the fundamentals of technical language and training writing skills. Russian for Advanced Students P2 set on RP1. It expands grammatical structures important for understanding technical texts (verbal adjectives, participles, passives, verb asp	range in field eans of a pres also includes ZK   ing of two part ssment. More Z   or inted and had ay and giving of f the RZ2 cou Z   otable. Z   or half of the tir ZK   d skills acquire ns by the teach Z   more difficult g	situation: ds such a eentation, translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 ne allotte 4 ed in RM her. 2 grammar 2
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design pasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course conter - RM3. Stuc 04XRP1 The entrance req 04XRP2 The course is bas	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination tt is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consistin cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the R23 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to R24, however, for half of the time allotted in the time Russian for Intermediate Students M3 pes the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of R25, however, for in the timetable. Russian for Intermediate Students Examination tis the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and lents are eligible for the oral examination only after a prior pass in RM3 and a successful written examination. Students are given instruction Russian for Advanced Students P2 ed on RP1. It expands grammatical structures important	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and hat ay and giving of f the RZ2 cou Z   table. Z   or half of the tir ZK   d skills acquire as by the teach Z   more difficult g pects, specific	situations ds such a entation, translatic 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4 ed in RM her. 2 grammar 2 syntactic
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is desig pasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course conter - RM3. Stuc 04XRP1 The entrance req 04XRP2 The course is bas 04XRP3	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination it is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisti cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the R23 course, but for half of the time allotted in the time table. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to R24, however, for half of the time allotted in the time table. Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, for in the timetable. Russian for Intermediate Students EX1 is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and lents are eligible for the oral examination. The diverse as in RM3 and a successful written examination. Students are given instruction Russian for Advanced Students P1 uirement for the course is to achieve the B1 CEFR level. The obje	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and hai ay and giving of f the RZ2 cou Z   or half of the tir ZK   d skills acquire is by the teach Z   more difficult g pects, specific Z	situations ds such a entation, translatic 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4 ed in RM her. 2 grammar 2 syntactic 2
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is design pasic vocabulary for they can use bar 04XRM2 04XRM3 The course develop 04XRM3 The course conter - RM3. Stud 04XRP1 The entrance req 04XRP1 The entrance req 04XRP2 The course is bas 04XRP3 The course is bas	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination it is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisti prover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 greed for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the was is grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the R23 course, but for half of the time allotted in the timetable. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to RZ4, however, for half of the time allotted in the time table. Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, fo in the timetable. Russian for Intermediate Students P1 uirement for the coarse is to achieve the B1 CEFR level. The objective of the coarse is revision of standard language structures, practicing structures, understanding the fundamentals of technical language and training writing skills. Russian for Advanced Students P2 ed on RP1. It expands grammatical structures important for understanding technical texts (verbal adjectiv	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   or inted and had ay and giving of f the RZ2 cou Z   otable. Z   or half of the tir ZK   d skills acquir nos by the teach Z   more difficult g pects, specific Z   slation). The F	situations ds such a eentation, translatic 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4 ed in RM her. 2 grammar 2 syntactic 2 RP1 - RP
nuclear power er students are traine 04XNPZK The course conter and oral, which of 04XRM1 The course is desig basic vocabulary for they can use bas 04XRM2 04XRM3 The course develop 04XRM3 The course conter - RM3. Stuc 04XRP1 The entrance req 04XRP2 The course is bas 04XRP3 The course is bas 04XRP3	In the environment, computer science, and car technology, will also be extended. Only authentic professional texts are used. By me d to process information gained from their reading of complex and difficult texts and present it to the class in a simplified oral form. The course practice to and from German. German for Advanced Students Examination it is the examination as given by the study plan. The whole German for Advanced Students Course is completed by an examination consisti cover the courses NP1 - NP3. The oral part follows after passing the written part successfully and after obtaining the 04NP3 ungraded asses information is to be obtained from the teacher. Russian for Intermediate Students M1 gned for students with previous knowledge of Russian from secondary schools. Students are supposed to know the Russian alphabet (both p or communication in everyday situations (introductions, socializing, greetings, shopping for food and objects of everyday need, asking the wa sic grammar structures (verbal and nominal forms, irregular verbs, pronouns). The initial knowledge corresponds to the achievement level of contents and scope of the course correspond approximately to the R23 course, but for half of the time allotted in the time table. Russian for Intermediate Students M2 The course is based on the RM1 course, its contents and scope correspond roughly to R24, however, for half of the time allotted in the time table. Russian for Intermediate Students M3 ps the knowledge and skills acquired in RM1 and RM2 and its contents and scope are roughly at the same level as those of RZ5, however, for in the timetable. Russian for Intermediate Students EX1 is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and lents are eligible for the oral examination. The diverse as in RM3 and a successful written examination. Students are given instruction Russian for Advanced Students P1 uirement for the course is to achieve the B1 CEFR level. The obje	v range in field eans of a pres also includes ZK   ing of two part ssment. More Z   orinted and har ay and giving of f the RZ2 cou Z   table. Z   or half of the tir ZK   d skills acquire is by the teach Z   more difficult g ects, specific Z   slation). The F ses develop a	situation: ds such a entation, translatio 4 ts - writte detailed 2 ndwritter directions rse. The 2 2 me allotte 4 ed in RM her. 2 grammar 2 syntactio 2 RP1 - RP nd expar

develop their subtechnical vocabulary and practice quick and correct communication in professional situations. They will be able to both speak write accurately and with confidence on technical topics

04XRPZK Russian for Advanced Students Examination ZK	
	4
The course content is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and skills acquired	in RP1
- RP3. Students are eligible for the oral examination only after a prior pass in RP3 and a successful written examination. Students are given instructions by the teacher.	
04XRZ1 Russian for Beginners Z1 Z	2
The course represents the first stage of the five-semester programme, its final aim being reading and understanding professional texts written in Russian. Thus it begins with ma	
the Russian alphabet (for both reading and writing skills) and fundamentals of grammar necessary for everyday communication (listening and speaking). Students will be able	-
a short text with marked stress, understand its contents and summarize it.	
04XRZ2 Russian for Beginners Z2 Z	2
The second semester of the programme is designed to teach skills for basic communication in everyday situations and for reading easy and short subtechnical texts. Students	
able to communicate using short sentences and appropriate structures, and read aloud with confidence a short text without marked stress. They will also develop their vocabul	
master further grammatical structures. They will have mastered with confidence the Russian alphabet and will be able to use it in writing.	ary anu
04XRZ3 Russian for Beginners Z3 Z	2
The course is based on RZ2 and includes further everyday topics, develops understanding of short compact texts on new subtechnical topics (for training various forms of reading of short compact texts on new subtechnical topics).	-
and listening) and introduces new grammar. Students will be trained to distinguish intonation patterns while listening to spoken language. They will be able to respond so as	to be
understood, and to express their opinion. Writing skills will be trained on guided writing tasks and note-taking.	
04XRZ4 Russian for Beginners Z4 Z	2
The course is based on RZ3. It improves and expands the knowledge of general language in all four skills (reading and understanding longer texts with a certain percentage of un	ıfamiliar
words, oral communication in everyday situations, writing longer texts). Students are trained to use grammar structures effectively (e.g., irregular verbs, differences in verb pa	atterns
from Czech, modality, imperatives, conditionals). They practice and develop communication skills for everyday situations (food, travelling, free time), and practice oral and we	
communication on more specific topics (environment, addictions, the green movement). They become acquainted with various geographical data (e.g., Siberia), learn how to	o fill in
forms, look up the information from the timetable, learn about Russian holidays and typical meals.	
04XRZ5 Russian for Beginners Z5 Z	2
The course expects the student to have completed RZ4. It concentrates predominantly on reading skills (working with professional texts, i.e. understanding, extracting and summ	- 1
information from a specialized text) and speaking, and to a certain extent, writing about the professional information obtained by reading the texts. Communication skills are tra	ined on
everyday topics. Studying grammar is based on professional and technical texts and only includes items typically used in professional communication (verbal adjectives, parti	ciples,
passive voice). Students develop their technical and economic vocabulary, and are also trained in some professional skills (writing a CV, polite request, etc.)	
04XRZZK Russian for Beginners Examination ZK	3
The course content is the examination as given by the study plan. The course is completed by taking a written and oral examination testing the knowledge and skills acquired	in RZ1
- RZ5. Students are eligible for the oral examination only after a prior pass in RZ5 and a successful written examination. Students are given instructions by the teacher.	
04XSM1 Spanish for Intermediate Students M1 Z	2
The course is designed for students whose competence is at level B1 of CEFR, i.e. those who studied Spanish in the secondary school. The 3-semester course develops sta	
vocabulary and pays attention to further grammar topics (e.g., perifrasis verbales, futuro imperfecto, direct object and indirect object pronouns, negative form of the imperative	
subjunctive), to written and oral communication on a given everyday or easy subtechnical topic, for which the students are trained by reading texts or listening to them.	
04XSM2 Spanish for Intermediate Students M3 Z	2
The course develops the students' knowledge from the previous course (SM1). Students are gradually acquainted with fundamentals of Spanish for specific purposes in orde	
able to work with specialized texts on the Internet.	
04XSM3 Spanish for Intermediate Students M3 Z	2
The course books are supplemented with additional subtechnical materials, so the students will be gradually acquainted with the peculiarities of academic style. They will be cor	-
enough to use the Internet in Spanish and search for information of their specialization or field of interest. Students will use the information to write short articles and summari	
final part of the programme, general Spanish course based on course books, covers presentations and, finally, a written and oral examination.	
04XSMZK Spanish for Intermediate Students Examination ZK	
The course content is the examination as given by the study plan. SMZK examination consists of two parts - written and oral; to be eligible for the written part, students will have o	4
	4
	•
non-graded assessment for course SM3.Oral examination follows the written part.	btained
non-graded assessment for course SM3.Oral examination follows the written part.       04XSP1     Spanish for Advanced Students P1     Z	btained
non-graded assessment for course SM3.Oral examination follows the written part.           04XSP1         Spanish for Advanced Students P1         Z           Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I	btained
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.	2 level B2
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z	2 level B2
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on independent of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on independent of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on independent of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on independent of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on independent of the advanced Spanish course, extending Spanish for specific purposes topics.	2 level B2
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.	2 level B2 2 pendent
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.         04XSP3       Spanish for Advanced Students P3       Z	2 level B2 2 pendent 2
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.         04XSP3       Spanish for Advanced Students P3       Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.	2 level B2 2 pendent 2
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Advanced Students P3       Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.       Z	2 level B2 2 pendent 2
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.         04XSP3       Spanish for Advanced Students P3       Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.	2 level B2 2 pendent 2
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Advanced Students P3       Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.       Z	2 level B2 2 pendent 2 nication 4
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.       Z         04XSP3       Spanish for Advanced Students P3       Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.       Z         04XSP2K       Spanish for Advanced Students Examination       ZK	2 level B2 2 pendent 2 nication 4
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP2       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP4       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Advanced Students excording to their future specialization. It is focused on written communication.         04XSP2K       Spanish for Advanced Students Examination       ZK         04XSP2K       Spanish for Advanced Students Examination       ZK         04XSP2K       Spanish for Advanced Students Examination       ZK	2 level B2 2 pendent 2 nication 4
non-graded assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         04XSP2       Spanish for Advanced Students P2       Z         04XSP3       Spanish for Advanced Students P3       Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.       D4XSP2K         04XSPZK       Spanish for Advanced Students Examination       ZK         04XSPZK       Spanish for Advanced Students Examination       ZK         nthe course content is the examination as given by the study plan. Examination SPZK consists of two parts, namely oral and written. The prerequisite for admission to oral part is passed the written test. Examination content is based on sy	2 level B2 2 pendent 2 nication 4 s having 2
Inon-graded assessment for course SM3.Oral examination follows the written part.         O4XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         O4XSP2       Spanish for Advanced Students P2       Z         Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.       Z         O4XSP3       Spanish for Advanced Students P3       Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.       ZK         O4XSPZK       Spanish for Advanced Students Examination       ZK         O4XSPZK       Spanish for Advanced Students P3, namely oral and written. The prerequisite for admission to oral part is passed the written test. Examination content is bas	2 level B2 2 pendent 2 nication 4 s having 2
Interview         Interview <thinterview< th="">         Interview         <thinterview< th="">         Interview           <th< td=""><td>2 level B2 2 pendent 2 nication 4 s having 2</td></th<></thinterview<></thinterview<>	2 level B2 2 pendent 2 nication 4 s having 2
OdXSP1         Spanish for Advanced Students P1         Z           Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         Z           04XSP2         Spanish for Advanced Students P2         Z           04XSP3         Spanish for Advanced Students P2         Z           04XSP3         Spanish for Advanced Students P3         Z           Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students will need in their career.         Z         Z           04XSP2K         Spanish for Advanced Students Examination         ZK           04XSP2K         Spanish for Advanced Students Examination         ZK           04XSP2K         Spanish for Advanced Students Examination         ZK           The course content is the examination as given by the study plan. Examination SPZK consists of two parts, namely oral and written. The prerequisite for admission to oral part is passed the written tes	2 level B2 2 bendent 2 nication 4 s having 2 and will 2
Interpretation       Image: Construction of the advanced assessment for course SM3.Oral examination follows the written part.         04XSP1       Spanish for Advanced Students P1       Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.       Q         04XSP2       Spanish for Advanced Students P2       Z         Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.       Z         04XSP3       Spanish for Advanced Students P3       Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.       Z         04XSPZK       Spanish for Advanced Students P3       Z         04XSPZK       Spanish for Advanced Students Examination       ZK         04XSPZK       Spanish for Advanced Students Examination       ZK         04XSP2       Spanish for Beginners Z1       Z         04XSP3       Spanish for Beginners Z1       Z         04XSP3       Spanish for Beginners Z1       Z         04XSP3       Spanish for Advanced Students P3       Z         04XSP3       Spanish for Beginners Z1       Z	2 level B2 2 poendent 2 nication 4 s having 2 and will 2 0 enable
OdXSP1         Spanish for Advanced Students P1         Z           Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         Z           04XSP2         Spanish for Advanced Students P2         Z           Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.         Z           04XSP3         Spanish for Advanced Students P3         Z           Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.         Z           04XSP2K         Spanish for Advanced Students P3         Z           04XSP2K         Spanish for Advanced Students examination         ZK           04XSP2K         Spanish for Advanced Students Examination         ZK           04XSP2K         Spanish for Advanced Students Examination         ZK           04XSP1         Spanish for Beginners Z1         Z           04XSP2         Spanish for Beginners Z1         Z           04XSP3         Spanish for Beginners Z1         Z           04XSP3         Spanish for Beginners Z1         Z           04XSP3         Spanish for Beginners Z1	2 level B2 2 poendent 2 nication 4 s having 2 and will 2 0 enable
Interpretendent         Image: Construction of the advanced assessment for course SM3.0ral examination follows the written part.         Z           04XSP1         Spanish for Advanced Students P1         Z         Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         O4XSP2         Spanish for Advanced Students P2         Z <t< td=""><td>2 level B2 2 poendent 2 nication 4 s having 2 and will 2 0 enable</td></t<>	2 level B2 2 poendent 2 nication 4 s having 2 and will 2 0 enable
Interpretend assessment for course SM3.Oral examination follows the written part.           O4XSP1         Spanish for Advanced Students P1         Z           Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         Z           04XSP2         Spanish for Advanced Students P2         Z           Course SP2 is the second part of the advanced Spanish course, extending Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students P3         Z           Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.         Z           04XSP2K         Spanish for Advanced Students EXamination         Z           04XSP2K         Spanish for Advanced Students Students examination         ZK           04XSP2K         Spanish for Advanced Students Students examination         ZK           04XSP2K         Spanish for Advanced Students Examination         ZK           04XSP1         Spanish for Beginners Z1         Z           04XSP2K         Spanish for Beginners Z1         Z           04XSP1         Spanish for Beginners Z1         Z           04XSP2         Spanish for Beginners Z1         Z           C	2 level B2 2 bendent 2 nication 4 s having 2 and will 2 b enable epublic. 2
Non-graded assessment for course SM3.0ral examination follows the written part.         Z           04XSP1         Spanish for Advanced Students P1         Z           Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: 1 of CEFR.         Z           04XSP2         Spanish for Advanced Students P2         Z           Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.         Z           04XSP3         Spanish for Advanced Students P3         Z           Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.         ZK           04XSPZK         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP4         Spanish for Advanced Students P3         Z           04XSP4         Spanish for Advanced Students P3         Z           04XSP4         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Be	2 level B2 2 2 bendent 2 nication 4 s having 2 and will 2 enable epublic. 2 untries,
Non-graded assessment for course SM3.0ral examination follows the written part.         Z           04XSP1         Spanish for Advanced Students P1         Z           Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         Z           04XSP2         Spanish for Advanced Students P2         Z           04XSP3         Z         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students Examination         ZK           04XSP3         Spanish for Advanced Students P3         Z	2 level B2 2 2 bendent 2 nication 4 s having 2 and will 2 enable epublic. 2 untries,
Non-graded assessment for course SM3.0ral examination follows the written part.           04XSP1         Spanish for Advanced Students P1         Z           Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.         Z           04XSP2         Spanish for Advanced Students P2         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP4         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP4         Spanish for Advanced Students P3         Z           04XSP2         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP2         Spanish for Advanced Students P3         Z           04XSP2         Spanish for Advanced Students Examination Students Examination Students Examination Students Examination Statues:         Z           04XSP2         Spanish for Advanced Students Examination         ZK           04XSP2         Spanish for Advanced Students Examination         ZK           04XSP2         Spanish for Beginners Z1         Z           04XSZ1	2 level B2 2 2 bendent 2 nication 4 s having 2 and will 2 enable epublic. 2 untries,
Non-graded assessment for course SM3.0ral examination follows the written part.           O4XSP1         Spanish for Advanced Students P1         Z           Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.           O4XSP2         Spanish for Advanced Students P2         Z           Course SP2 is the second part of the advanced Spanish course, extending Spanish for Advanced Students P3         Z         Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communication.           04XSP3         Spanish for Advanced Students P3         Z           Course SP3 is the final part of the advanced Spanish course. It is based on texts chosen by the students according to their future specialization. It is focused on written communicate on what students will need in their career.         ZK           04XSPZK         Spanish for Advanced Students Examination SPZK consists of two parts, namely oral and written. The prerequisite for admission to oral part is passed the written test. Examination content is based on syllabi of courses SP1, SP2, and SP3 or on an individual study plan of the student.           04XSP1         Spanish for Beginners Z1         Z           Course SZ1 is the first stage of the fire-semester programme of Spanish for Beginners Students Z2         Z         Course SZ1 is based on course SZ1, and expects students to develop and extend the knowledge and skills acquired so far.	betained 2 level B2 2 pendent 2 nication 4 s having 2 and will 2 penable epublic. 2 nutries, d oral 2
Odd         Ourse and assessment for course SM3.0ral examination follows the written part.           04XSP1         Spanish for Advanced Students P1         Z         Course concentrates on more difficult grammar topics, revision of vocabulary, basics of Spanish for specific purposes as well as written communication. Course prerequisites: I of CEFR.           04XSP2         Spanish for Advanced Students P2         Z           Course SP2 is the second part of the advanced Spanish course, extending Spanish for specific purposes topics. It comprises more grammar and syntax and focuses on indep written communication.         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP3         Spanish for Advanced Students P3         Z           04XSP2K         Spanish for Advanced Students P3         Z           04XSP2K         Spanish for Advanced Students Examination         ZK           04XSP2K         Spanish for Advanced Students Examination         ZK           04XSP2K         Spanish for Advanced Students Examination         ZK           04XSP2         Spanish for Beginners Z1         Z           04XSP2         Spanish for Beginners Z1         Z           04XSP2         Spanish for Beginners Z1         Z           04XSP2         Spanish for Beginners Students Z2         Z           04XSP2         Spanish for Beginners Students Z2         Z	betained 2 level B2 2 pendent 2 nication 4 s having 2 and will 2 o enable epublic. 2 nutries, d oral 2 ainly of

04XSZ5	Spanish for Beginners Z5	7	2
	are supplemented with additional subtechnical materials, so the students will be gradually acquainted with peculiarities of Spanish for	r specific purpose	
	part, the general Spanish course based on the course book will end with presentations and, finally, a written and oral examination		
04XSZZK	Spanish for Beginners Examination	ZK	3
The course conte	ent is the examination as given by the study plan. Examination consists of two parts - written and oral. Student can register for oral ex	amination only if h	ie/she has
4400514	passed the written examination test.		
11BSEM	Bachelor Seminar he seminar, students familiarize themselves with the general principles of publishing and presenting scientific work and the formal requ	irements for back	1
	ulty. The second part is designed as a practical training for the defence of the bachelors degree project. The students give oral preserved		-
	s achieved during the work on their projects. Each presentation is followed by a discussion on scientific matters as well as on the possib		
	performance.		
11UFP	Introduction to Solid State Physics	ZK	3
	ains the fundamentals of diffraction stress analysis with a strong emphasis on the illustrations of the capability of X-ray diffraction to s	<u> </u>	
11UFPLN	Introduction to Solid State Physics	ZK	2
11ZFP	The purpose of this lecture is to introduce the undergraduate students to the study of the solid state physics.	ZK	3
	Basic to Solid State Physics amental properties of solids following the regular long distance ordering of atoms in a crystal lattice. Based on the introduced bonding		-
	is of crystals and their properties are defined. The model of crystalline lattice dynamics in harmonic approximation is described and basi	-	
	periodic potential of the crystal lattice is introduced and its relation to the following model describing the energetic state of electrons in		
energy bands ex	xplained. The special consequences of band approach to the physical properties of solids are elucidated. The aim of the course is to s	systematically intro	oduce and
	interpret a broad phenomenological basis of physical properties of crystalline solids		
11ZFPL	Basic to Solid State Physics	KZ	2
· ·	amental properties of solids following the regular long distance ordering of atoms in a crystal lattice. Based on the introduced bonding is of crystals and their properties are defined. The model of crystalline lattice dynamics in harmonic approximation is described and basi	•	
	periodic potential of the crystal lattice is introduced and its relation to the following model describing the energetic state of electrons in		-
	cplained. The special consequences of band approach to the physical properties of solids are elucidated. The aim of the course is to s		
	interpret a broad phenomenological basis of physical properties of crystalline solids		
12APL	Application of Lasers	Z,ZK	2
	pplication of lasers in industrial technologies, medicine, remote sensing, energetics, telecommunication, military, entertainment and of		
12BPFI1	Bachelor Project 1	Z	5
The bachelor proje	ct is based on a topic approved by the administrators of the programme, department and by the dean. The student is guided by the proj	ect supervisor duri	ing common
12BPFI2	regular meetings and discussions.	Z	10
	Bachelor Project 2 ct is based on a topic approved by the administrators of the programme, department and by the dean. The student is guided by the proj		-
	regular meetings and discussions.		ing common
12EPR1	Basic Electronics Practicum 1	KZ	3
The aim of the pr	acticum is 1) to acquire basics skills in electronics and 2) to learn independent problem solving, formulation of a task and formulation	of the results. The	practicum
	consists of blocks lasting 4 hours.		
12EPR2	Basic Electronics Practicum 2	KZ	3
The aim of the pr	acticum is 1) to acquire basics skills in electronics and 2) to learn independent problem solving, formulation of a task and formulation	of the results. The	practicum
12LAS	consists of blocks lasting 4 hours. Laser Systems	Z,ZK	3
	e nanosecond lasers. Picosecond lasers. High energy laser systems. Laser fusion. Diode-pumped solid state lasers. Tunable lasers. C		
	Semiconductor lasers for pumping of solid state lasers and diode pumped solid state lasers Amplified spontaneous emission. Ultravi		•
	power continuous lasers. Infrared high power lasers. Submilimeter lasers. Lasers with high degree of coherence. Free electron I	asers.	
12LTB1	Laser Technique 1	Z,ZK	3
-	Stability. Transverse and Longitudinal Modes. Elements of Open Resonators. Threshold of laser oscillations. Gausian beam as an app		
	ethod. Optical radiation propagation in resonant medium. Two-level approximation. Equations for polarisation and inversion, dispersio non-coherent pulse propagation. Optical solitons. Photon echo. Superradiation. Amplified spontaneous emission Lasers without optica		erent and
12LTB2	Laser Technique 2	Z,ZK	3
12LID2	Laser oscillator, the rate equation, the laser amplifier, Q-switching, mode-locking	Ζ,ΖΙ	3
12MOF	Molecular Physics	ZK	2
	deas on physics of molecules and molecular matter, and on structure-to-physical properties relationship. Methods of molecular struct	I	
12MPP1	Microprocessor Laboratory 1	KZ	4
	ed with a development board based on PIC16F873A and PIC16F877A microcontrollers, development environment MPLAB X IDE, PF	≀ESTO programme	er, ASIX UP
	program, and PICkit3 debugger. Programming in assembly and C language for microcontrollers. Basic operations with microcontrolle		
12MPP2	Microprocessor Laboratory 1	KZ	4
Learning to use n	nore PIC16F877A internal modules on PVK40 development board: PWM module (Capture/Compare), parallel communication interface USART serial communication interfac	ce (controlling char	racter LCD
12MPR1	device), serial communication interface USART, serial communication interface I2C/SPI, microcontroller PIC18F45K20	ZK	4
	Microprocessors 1 nd microcomputer, microprocessor types, memory types CPU, memory, Input output. Code and data, addressing modes( direct, indir		
	e calls, IO devices - program control, interrupt. Microprocessor Microchip PIC16F877A, Instruction codes- Assembler and Macroasser		
	RISC processors - principles		
12MPR2	Microprocessors 2	ZK	2
	chitecture IA-32. Data types and addressing. Memory segmentation and paging. Real and privileged mode. Instruction set, Assemble		
12NME1	Numerical Methods 1	Z,ZK	4
	d the basic principles of numerical mathematics important for numerical solving of problems important for physics and technology. Me		-
important for phys	icists (ordinary differential equations, random numbers) are included in addition to the basic numerical methods. Integrated computat used as a principle programming language as a demonstration tool. The seminars are held in computer laboratory.	ional environment	IVIAI LAB IS
L	assa as a principio programming language as a demonstration tool. The seminars are need in computer laboratory.		

12NT	Nanotechnology	ZK	2
	Juce students mainly to modern technological methods of preparation of semiconductor, metal and dielectric nanostructures. Physica	1 1	_
	pgies (MBE, MOVPE, EBL, sol-gel and colloidal solution) will be explained. Substantive attention will be devoted to epitaxial technologi		
	paration. Particular emphasis will be focused on detail characterization of "in situ" and "ex situ" techniques, their applications for heter	-	
	cussed as well. Some supportive technical methods - lithography, diffusion, evaporation, ion implantation, contact and dielectric layer		
growing the second	as well as soldering and encasement.	proparation millio	
12OSY	Operating Systems	ZK	3
	kernel, memory management, process, multitasking, interprocess communication, input/output, drivers, queues, client-server, internet	I —·· I	-
	environment, user interface, system security, open systems.	communication, ind	innanguage
40040		Z	
12PAS	Computer Algebra Systems	I – I	2
Practically oriente	d introduction to computer algebra systems (CAS): their main characteristics, ways and means of using them. Constituent part is real	ized in computer ci	assrooms:
400051	students acquire basic skills with CAS by solving relatively simple and basic tasks from mathematics and physics.		
12RSEN	Control Systems and Sensors	Z,ZK	4
	esses the theory, analysis, and implementation of linear analog and digital control systems, as well as sensors for various physical qu		
devoted to compute	er modeling and simulation using MATLAB, along with practical measurements conducted by the students on a continuous system with ana		mechanism
	with an electric motor) or a continuous system with discrete control (temperature control using a thermoelectric cooler modu		
12UFN	Introduction to Photonics and Nanostructures	KZ	3
Overview of nanos	tructures and nanotechnologies; quantum technologies; quantum nanostructures; photonic structures; nanophotonics and nanoplasm	onics; optical wave	guides and
	fibers; integrated photonics; computer simulations; technological realization; student presentations		
12ULTB	Introduction to Laser Technique	KZ	3
Overview of electr	omagnetic radiation sources; laser principle; classification of lasers; characterization and rough application of various types of lasers;	laser safety precau	utions. The
	laser amplifier, Q-switching, mode-locking.		
12UNXAP	Introduction to UNIX	Z	2
Computer and c	perating systems. Personal computer, workstation and supercomputers. Processor, memory, bus, devices, hard disk, network interfa-	ce. Hardware and s	oftware.
Principles of opera	ting systems. Operating system UNIX. Basic principles, kernel, kernel services. Documentation. File system, file atributes, working wi	th files. Text editors	: vi, emacs.
Command interpr	reter (shell) bash and its programming (scripts). Controlling processes, process status, computer load a process priorities. Standard to	ools. Graphical user	r interface
X-windows. Cor	nputer networks. Local computer networks. Global computer networks. Addresses and protocols TCP/IP. Network configutation of a c	omputer. Network s	ervices:
	hardware sharing, mail, scp, etc. Network applications		
12UVP	Introduction to Scientific Computing	Z	2
Practically oriente	d Introduction to scientific computing. Constituent part of the course is realized in computer classroom. Students get acquinted with s	ome basic tools for	t scientific
	and technicval computing, data analysis, data visualisation and algorithm development.		
12VFT	High Frequency and Impulse Circuitry	Z,ZK	2
	rse is to collect advanced knowledge in high frequency technics and high speed events. The course is focused on Maxwell equation s		
, , , , , , , , , , , , , , , , , , ,	frequency technics, microwaves guidelines, striplines, oscillators, amplifiers and pulse generators.		
12VKT	Vacuum Technology	KZ	4
	basic concepts and relations; diffusion, flow of rarefied gases. Flow and current of gas, conductivity. Interaction of gas with solid surfa	1 1	•
-	olid matter; evaporation, condensation; Vacuum generation: Pumping proces, Ultimative pressure, Pumping speedPumps and their pro		-
	m, Sliding vane rotary, Diffusion, Molecular, Roots, Molecular and Turbomolecular pumps. Sorption pumps: Cryopumps, Cryo-Adsorp	-	-
	jetter pumps. Vacuum measurements: vacuum gauges of total and partial pressure; pumping speed; gas flow, search for leaks. Mater		
	and seals.Practical exercises.		
12VPMF	Selected Topics in Modern Physics	7	3
	Irse is to improve students knowledge in modern parts of physics (such as measuring of gravitational waves, neutrinos, discovery of l		-
	) with a partial help of computer algebra systems (e.g. Maple). Apart from the other courses related to modern physics taught in this st		-
,	ed mathematical formalism of studied phenomena. Therefore, the secondary aim is the increase of students motivation for deeper und		
	and its laws in their following study		0111 p11) 0100
12VTV	Scientific and Technical Computing	Z	2
	familiar with methods of solving of computational problems in the scientific and technical practice, and with methods of their program	1 1	
	mainly to programming in the Fortran language.	ming. The course is	onenteu
107400		771/	2
12ZAOP	Fundamentals of Optics s the very basics of optics - electromagnetic theory, linear optical physics and material effects, basics of nonlinear effects, and geome	Z,ZK	2 ain goal of
		•	0
	otain, on the bachelor level, broad and general information on optics, giving an essential orientation in the field, especially with respec oics are further elaborated during departmental masters program. The lecture stems from the electrodynamic notion of plane waves in		
	ther from material medium. It explains basics of linear and nonlinear response in material medium and dispersion properties. It next in		
	, it explains processes induced by boundary conditions at interfaces. It also discusses the consequences of statistics on interference	-	
	rence and their applications in interferometers. Based on the Fresnel diffraction integral, diffraction processes are presented in a graphication and the second se		
	n. Based on this diffraction principle, basic functioning of holography is clarified. Finally, the lecture unravels the geometrical optics limit	-	
	proach imaging, substitutive schema of a paraxial imaging system, and optical aberrations. It shows fundamentals of imaging in optical	-	goomourou
12ZEL1	Basic Electronics 1	Z,ZK	3
	des primary knowledge of circuit theory concerning principles of electronic circuits in both stationary and harmonic stable state. Circu	I ' I	-
	e symbolic and complex method are explained. Proper circuit analysis is also lectured. The subject's final part deals with transient eff	-	
12ZEL2			3
	Basic Electronics 2	Z,ZK	-
	ws up with the Basic Electronics 1. Semiconductor elements basic properties are explained. Thecourse's final part deals with basic th	-	
12ZELD	Fundamentals of Electrodynamics	Z,ZK	2
	derivation of Maxwell-Lorentz microscopic equations followed by transition to Maxwell macroscopic theory. Using special theory of re		
	eld vectors between two inertial systems of coordinates with appropriate invariants. Wave and Helmholtz equations are derived. By expan	-	
	of solving these equations are studied in homogeneous media with gradually increasing complexity: isotropic without losses, with abs		
	ic. Finally, solution in weakly non-homogeneous madia is presented using the method of eiconal. Individual chapters are illustrated by		
12ZFD	Physical Data Visualization	KZ	2
	Vector graphics basics, scientific plots, dala visualization basics, measurements results presentation		

			1 .
12ZFP	Principles of Plasma Physics	Z,ZK	4
.,	h temperature plasmas is explained using particle, kinetic and fluid approaches. It includes drift motions and adiabatic invariants, line	•	•
	electromagnetic waves in inhomogeneous plasmas. Basic non-linear effects, such as ponderomotive force, self-focusing and parame omprises brief introduction into magnetohydrodynamics and nuclear fusion. Basics of atomic physics od multiply-ionized plasmas ar		ire explained
		1	
12ZFS	Fundamentals of Photonic Structures	Z,ZK	2
	he basics of photonic structures, it classifies photonic structures compares them with the electronic structures, summarizes their pre-	•	
	lecture discusses the basic physics and technology of optical waveguides; it introduces basic linear, nonlinear, and active structures tical communications and sensors. Next, the attention is given to introduction of plasmonic structures and plasmonics, periodic structures and plasmonics.		
	etasurfaces, and finally to photonic structures for quantum technologies. Finally, the lecture is closed with student presentations on	•	
metamatenais, m	excursions to selected photonic laboratories.	Selected Televallt	
12ZMDT	Measurement and Data Processing	Z.ZK	2
I	or the measurements and data processing and result interpretation: errors, precision, accuracy, normal distribution and its propeties,	· ·	. –
Bable knowledge la	signal from the noise.	data mang, cope	
12ZPLT	Basic Laser Technique Laboratory	KZ	6
	Id:YAG laser, laser crystal, laser discharge lamp, laser cavity, resonator, free-running, Q-switching, laser amplifier. second harmonic,		-
	e pumped Nd:YAG laser, CO2 laser marking, laser materials properties, non-linear transmission, laser beam transverse profile, acou	-	-
12ZPOP	Basic Optical Laboratory	KZ	6
Th	e practical laboratories give advanced practical skills by experimental work in optics and optoelectronics. Laboratory records must b	e elaborated.	1 -
14ELM	Electron Microscopy	KZ	2
1	rse the students are introduced to the microscopic methods used for the characterization of materials, thin layers or nanoparticles. The	1	-
	nt and electron microscopy and to various types of microscopes. An important part of the course is given to the interaction of differen		
0, 0			
	lations and tools used in microscopy and to the description of particular parts of the microscopes. Introduction to kinematic and dyna		
	and diffraction and imaging techniques are also covered. A particular attention is given to analytical methods and imaging technique		-
14TED	Creating Electronic Documents	Z	2
Basic skills for creat	ing and presenting student theses. Individual exercises focus on creating and formatting texts, equations, charts, tables, presentatio	ns and entire doc	uments in a
45014	office suite.	7	0
15CH1	General Chemistry 1	Z	3
i në most important	concepts, quantities and units used in chemistry are introduced in the course General Chemistry I. Their significance and practical u solved in exercises.	ise are illustrated	by example
15CH2	General Chemistry 2	Z.ZK	3
	continuation of the course General chemistry I. The main attention is paid to general principles governing chemical processes. Using		
	principles is not restricted only to chemical processes is documented. The significance and practical use of explained principles are		
ne valially of these	in exercises.	indistrated by exa	1110103 30110
18PRC1	Programming in C++ 1	Z	4
	This course covers mainly the C programming language and non-object oriented features of the C++ language.	-	
18PRC2	Programming in C++ 2	KZ	4
	urse covers the object oriented programming and othesr advanced constructs in the C+;+ programming language and the Standard	1	
18ZALG	Basics of Algorithmization	Z,ZK	4
	devoted to selected algorithms and methods for algorithm design. This course intruduces selected methods for the determination of	, ,	nplexity.
18ZPRO	Basics of Programming	7	4
	tended mainly for students with little or no experience in programming. It familiarizes the students with the basic concepts in program	. –	
	programming language.	5	-
TV-1	Physical Education	Z	1
TV-2	Physical Education	Z	1
TV-3	Physical education	Z	1
TV-4		Z	1
I V-4	Physical education	<u> </u>	1 1

For updated information see <u>http://bilakniha.cvut.cz/en/FF.html</u> Generated: day 2025-07-15, time 23:41.