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## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚFV/ RVF2/06		<b>Course name:</b> General Physics II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 36s <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 10					
<b>Recommended semester/trimester of the course:</b> 1.					
<b>Course level:</b> N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b> Two written distance tests. Distance oral exam.					
<b>Learning outcomes:</b> To obtain a general view on basic electric magnetic phenomena and ability to solve basic problems of this subject.					
<b>Brief outline of the course:</b> Electric field in the free space. Work of the forces in the electrostatic field. Electrostatic field and steady current. Current in electrolytes, semiconductors, gasses and vacuum. Thermoelectric effects. Magnetic field in the free space. The interaction of moving charges with the electric current. Quasi steady electric field. Electromagnetic induction. Energy of magnetic field. AC current and circuits with ac current. Multiphase AC current. Rotating magnetic field. Electric effects in the substances. Magnetic properties of the substances. Magnetic polarization. Diamagnetism and paramagnetism, Magnetic ordering. Ferromagnetism.					
<b>Recommended literature:</b> I.S. Grant, W.R. Phillips, Electromagnetism, John Wiley&Sons, Ltd, England, 1990					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 4					
A	B	C	D	E	FX
0.0	25.0	50.0	0.0	25.0	0.0
<b>Provides:</b> prof. RNDr. Peter Kollár, DrSc.					
<b>Date of last modification:</b> 26.03.2020					
<b>Approved:</b> prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Andrej Bobák, DrSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚFV/ RZFP2/06		<b>Course name:</b> Introductory physical laboratory work II			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 24s <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 6					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b> The objectives of the laboratory are: a. To gain some physical inside into some of the concepts presented in the lectures. b. To gain some practice in data collection, analysis and interpretation of resumance. c. To gain experience and report writing presentation and results.					
<b>Brief outline of the course:</b> 1. Electrical Resistivity, Self - and Mutual Inductance and Capacity. 2. Serial and Parallel Resonance. 3. Thermal Dependence of Selected Electrical Phenomena in Solids. 4. The Characteristics of Semiconductor Diode. 5. The Characteristics of Semiconductor Bipolar Transistor. 6. Measurement of the ratio of Charge to Mass for Electron by the method of Magnetron. 7. Magnetic Hysteresis. 8. Hall Constant Measurements. 9. Measurements of Horizontal Component of Earth Magnetic Field 10. Measurements of the Focal Lenght of the Converging and Diverging Lens. 11. The Rotation of Polarization Plane of Light Beam. 12. The Refractive Index in Liquids. 13. The Phenomenon of Interference of Light.					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 0					
A	B	C	D	E	FX
0.0	0.0	0.0	0.0	0.0	0.0

<b>Provides:</b> doc. RNDr. Adriana Zelenáková, PhD.
<b>Date of last modification:</b> 03.05.2015
<b>Approved:</b> prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Andrej Bobák, DrSc.

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚFV/ RKV/06		<b>Course name:</b> Quantum Mechanics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 12s <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 10					
A	B	C	D	E	FX
90.0	0.0	0.0	0.0	10.0	0.0
<b>Provides:</b> prof. RNDr. Michal Jaščur, CSc.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Andrej Bobák, DrSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚFV/ RTEP/06		<b>Course name:</b> Theory of Electromagnetic Field			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 24s <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 9					
<b>Recommended semester/trimester of the course:</b> 2.					
<b>Course level:</b> N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 15					
A	B	C	D	E	FX
46.67	0.0	26.67	13.33	13.33	0.0
<b>Provides:</b> prof. RNDr. Andrej Bobák, DrSc.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Andrej Bobák, DrSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚFV/ RTMD/00		<b>Course name:</b> Thermodynamics			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 12s <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 5					
<b>Recommended semester/trimester of the course:</b> 4.					
<b>Course level:</b> N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 9					
A	B	C	D	E	FX
88.89	11.11	0.0	0.0	0.0	0.0
<b>Provides:</b> prof. RNDr. Michal Jaščur, CSc.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Andrej Bobák, DrSc.					

## COURSE INFORMATION LETTER

<b>University:</b> P. J. Šafárik University in Košice					
<b>Faculty:</b> Faculty of Science					
<b>Course ID:</b> ÚFV/ RVF4/06		<b>Course name:</b> Všeobecná fyzika IV			
<b>Course type, scope and the method:</b> <b>Course type:</b> Lecture <b>Recommended course-load (hours):</b> <b>Per week: Per study period:</b> 36s <b>Course method:</b> present					
<b>Number of ECTS credits:</b> 10					
<b>Recommended semester/trimester of the course:</b> 3.					
<b>Course level:</b> N					
<b>Prerequisites:</b>					
<b>Conditions for course completion:</b>					
<b>Learning outcomes:</b>					
<b>Brief outline of the course:</b>					
<b>Recommended literature:</b>					
<b>Course language:</b>					
<b>Notes:</b>					
<b>Course assessment</b> Total number of assessed students: 8					
A	B	C	D	E	FX
12.5	12.5	50.0	12.5	12.5	0.0
<b>Provides:</b> prof. RNDr. Gabriela Martinská, CSc., prof. RNDr. Stanislav Vokál, DrSc., doc. RNDr. Janka Vrláková, PhD.					
<b>Date of last modification:</b> 03.05.2015					
<b>Approved:</b> prof. RNDr. Peter Kollár, DrSc., prof. RNDr. Andrej Bobák, DrSc.					