| University: P. J. | Šafárik Univers | ity in Košice | | | | | |
|--|---|-------------------|-------|---|----|--|--|
| Faculty: Faculty | of Science | | | | | | |
| Course ID: ÚFV RVF2/06 | Course ID: ÚFV/ Course name: General Physics II CVF2/06 | | | | | | |
| Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 36s Course method: present | | | | | | | |
| Number of cred | its: 10 | | | | | | |
| Recommended s | semester/trimes | ster of the cours | e: 1. | | | | |
| Course level: N | | | | | | | |
| Prerequisities: | | | | | | | |
| Conditions for c Test. Oral examination | r ourse completi n. | on: | | | | | |
| Learning outcor To obtain a gene of this subject. | Learning outcomes: To obtain a general view on basic electric magnetic phenomena and ability to solve basic problems of this subject. | | | | | | |
| Brief outline of the course: 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. Thermoelctric 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 substancies. Magnetic polarization. Diamagnetism and paramagnetism, Magnetic ordering. | | | | | | | |
| Recommended I I.S. Grant, W.R. | Recommended literature: I.S. Grant, W.R. Phillips, Electromagnetism, John Wiley&Sons, Ltd, England, 1990 | | | | | | |
| Course language: | | | | | | | |
| Notes: | | | | | | | |
| Course assessment Total number of assessed students: 4 | | | | | | | |
| A | В | С | D | Е | FX | | |
| 0.0 25.0 50.0 0.0 25.0 0.0 | | | | | | | |
| Provides: prof. RNDr. Peter Kollár, DrSc. | | | | | | | |
| Date of last modification: 03.05.2015 | | | | | | | |
| Approved: prof. | RNDr. Peter Ko | ollár, DrSc. | | | | | |

| University: P. J | . Šafárik Univers | ity in Košice | | | | | | |
|---|---|-------------------------------|-------|--|--|--|--|--|
| Faculty: Facult | y of Science | | | | | | | |
| Course ID: ÚF RVF3/06 | Ourse ID: ÚFV/Course name: General Physics III/F3/06 | | | | | | | |
| Course type, sc Course type: I Recommended Per week: Per Course metho | ope and the met Lecture d course-load (h r study period: 2 d: present | thod: ours): 24s | | | | | | |
| Number of crea | lits: 9 | | | | | | | |
| Recommended | semester/trimes | ster of the cours | e: 2. | | | | | |
| Course level: N | [| | | | | | | |
| Prerequisities: | | | | | | | | |
| Conditions for | course completi | on: | | | | | | |
| Learning outco | omes: | | | | | | | |
| Brief outline of | the course: | | | | | | | |
| Recommended | literature: | | | | | | | |
| Course languag | ge: | | | | | | | |
| Notes: | | | | | | | | |
| Course assessment Total number of assessed students: 10 | | | | | | | | |
| А | A B C D E FX | | | | | | | |
| 20.0 0.0 10.0 60.0 10.0 0.0 | | | | | | | | |
| Provides: prof. RNDr. Pavol Miškovský, DrSc. | | | | | | | | |
| Date of last modification: | | | | | | | | |
| Approved: prof | . RNDr. Peter K | ollár, DrSc. | | | | | | |

| University: P. J | University: P. J. Šafárik University in Košice | | | | | | | | |
|--|---|-------------------|--------------|---|--|--|--|--|--|
| Faculty: Facult | y of Science | | | c | | | | | |
| Course ID: ÚF RZFP2/06 | ourse ID: ÚFV/ ZFP2/06Course name: Introductory physical laboratory work II | | | | | | | | |
| Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 24s Course method: present | | | | | | | | | |
| Number of cree | dits: 6 | | | | | | | | |
| Recommended | semester/trime | ster of the cours | e: 3. | | | | | | |
| Course level: N | | | | | | | | | |
| Prerequisities: | | | | | | | | | |
| Conditions for | course complet | ion: | | | | | | | |
| The objectives a. To gain some b. To gain some c. To gain expe | 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. | | | | | | | | |
| Brief outline of the course: 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. | | | | | | | | | |
| Course language: | | | | | | | | | |
| Notes: | | | | | | | | | |
| Course assessment Total number of assessed students: 0 | | | | | | | | | |
| А | A B C D E FX | | | | | | | | |
| 0.0 | 0.0 0.0 0.0 0.0 0.0 0.0 | | | | | | | | |

Provides: doc. RNDr. Adriana Zeleňáková, PhD.

Date of last modification: 03.05.2015

Approved: prof. RNDr. Peter Kollár, DrSc.

| University: P. J. | University: P. J. Šafárik University in Košice | | | | | | | |
|---|--|-------------------|--------------|--|--|--|--|--|
| Faculty: Faculty | y of Science | | | | | | | |
| Course ID: ÚF RKV/06 | Irse ID: ÚFV/ Course name: Quantum Mechanics | | | | | | | |
| Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 12s Course method: present | | | | | | | | |
| Number of crea | lits: 5 | | | | | | | |
| Recommended | semester/trime | ster of the cours | e: 3. | | | | | |
| Course level: N | [| | | | | | | |
| Prerequisities: | | | | | | | | |
| Conditions for | course completi | on: | | | | | | |
| Learning outco | omes: | | | | | | | |
| Brief outline of | the course: | | | | | | | |
| Recommended | literature: | | | | | | | |
| Course languag | ge: | | | | | | | |
| Notes: | | | | | | | | |
| Course assessment Total number of assessed students: 10 | | | | | | | | |
| А | A B C D E FX | | | | | | | |
| 90.0 0.0 0.0 0.0 10.0 0.0 | | | | | | | | |
| Provides: prof. RNDr. Michal Jaščur, CSc. | | | | | | | | |
| Date of last modification: 03.05.2015 | | | | | | | | |
| Approved: prof. RNDr. Peter Kollár, DrSc. | | | | | | | | |

| University: P. J. | Šafárik Univers | ity in Košice | | | | | | |
|---|--|--------------------------------|-------|--|--|--|--|--|
| Faculty: Faculty | of Science | | | | | | | |
| Course ID: ÚFV RTEP/06 | JFV/ Course name: Theory of Electromagnetic Field | | | | | | | |
| Course type, sco Course type: L Recommended Per week: Per Course methoo | ope and the met ecture course-load (h study period: 2 d: present | t hod: ours): 24s | | | | | | |
| Number of cred | lits: 9 | | | | | | | |
| Recommended | semester/trimes | ster of the cours | e: 2. | | | | | |
| Course level: N | | | | | | | | |
| Prerequisities: | | | | | | | | |
| Conditions for a | Conditions for course completion: | | | | | | | |
| Learning outco | mes: | | | | | | | |
| Brief outline of | the course: | | | | | | | |
| Recommended | literature: | | | | | | | |
| Course languag | e: | | | | | | | |
| Notes: | | | | | | | | |
| Course assessment Total number of assessed students: 15 | | | | | | | | |
| A | A B C D E FX | | | | | | | |
| 46.67 0.0 26.67 13.33 13.33 0.0 | | | | | | | | |
| Provides: prof. RNDr. Andrej Bobák, DrSc. | | | | | | | | |
| Date of last modification: 03.05.2015 | | | | | | | | |
| Approved: prof. | . RNDr. Peter Ko | ollár, DrSc. | | | | | | |

| University: P. J. | . Šafárik Univers | ity in Košice | | | | | | |
|---|---|-------------------|--------------|--|--|--|--|--|
| Faculty: Faculty | y of Science | | | | | | | |
| Course ID: ÚF RTMD/00 | Course ID: ÚFV/ Course name: Thermodynamics | | | | | | | |
| Course type, scope and the method: Course type: Lecture Recommended course-load (hours): Per week: Per study period: 12s Course method: present | | | | | | | | |
| Number of crea | lits: 5 | | | | | | | |
| Recommended | semester/trimes | ster of the cours | e: 4. | | | | | |
| Course level: N | | | | | | | | |
| Prerequisities: | | | | | | | | |
| Conditions for | Conditions for course completion: | | | | | | | |
| Learning outcomes: | | | | | | | | |
| Brief outline of | the course: | | | | | | | |
| Recommended | literature: | | | | | | | |
| Course languag | ge: | | | | | | | |
| Notes: | | | | | | | | |
| Course assessment Total number of assessed students: 9 | | | | | | | | |
| А | A B C D E FX | | | | | | | |
| 88.89 11.11 0.0 0.0 0.0 0.0 | | | | | | | | |
| Provides: prof. RNDr. Michal Jaščur, CSc. | | | | | | | | |
| Date of last modification: 03.05.2015 | | | | | | | | |
| Approved: prof. RNDr. Peter Kollár, DrSc. | | | | | | | | |

| University: P. J. | . Šafárik Univers | ity in Košice | | | | |
|---|---|--------------------------------|------------------|-------------------|------------------|--|
| Faculty: Faculty | y of Science | | | | | |
| Course ID: ÚF RVF4/06 | V/ Course name: Všeobecná fyzika IV | | | | | |
| Course type, sc Course type: I Recommended Per week: Per Course metho | ope and the met Lecture 1 course-load (h r study period: 2 d: present | t hod: ours): 36s | | | | |
| Number of crea | lits: 10 | | | | | |
| Recommended | semester/trimes | ster of the cours | e: 3. | | | |
| Course level: N | | | | | | |
| Prerequisities: | | | | | | |
| Conditions for | course completi | on: | | | | |
| Learning outco | mes: | | | | | |
| Brief outline of | the course: | | | | | |
| Recommended | literature: | | | | | |
| Course languag | ge: | | | | | |
| Notes: | | | | | | |
| Course assessm Total number of | i ent f assessed studen | its: 8 | | | | |
| А | В | С | D | Е | FX | |
| 12.5 12.5 50.0 12.5 12.5 0.0 | | | | | | |
| Provides: prof. Vrláková, PhD. | RNDr. Gabriela 1 | Martinská, CSc., | prof. RNDr. Star | nislav Vokál, DrS | Sc., RNDr. Janka | |
| Date of last mo | dification: 03.05 | 5.2015 | | | | |
| Approved: prof | RNDr. Peter Ko | ollár, DrSc. | | | | |