UNIVERSITY OF PLOVDIV "PAISII HILENDARSKI"

FACULTY OF CHEMISTRY

CONFIRM:

Dean of Faculty of Chemistry:
(Assoc. Prof. K. Kunchev)
Dean of Faculty of Physics:
(Assoc. Prof. G. Mekishev)

Rector:
(Full Prof. I. Kutsarov)

Faculty Board Minutes № 54 / 11. 11. 2002
Academic Board Minutes № 21 / 02. 12. 2002

CURRICULA

AREA OF HIGHER EDUCATION:	Education Sciences
PROFESSIONAL STREAM:	Pedagogy of Education on … (1.3)
SPECIALITY:	Chemistry and Physics
DEGREE:	Bachelor
PROFESSIONAL QUALIFICATION:	Teacher in Chemistry and Theacher in Physics
MODE OF STUDY:	Full-time
DURATION OF PROGRAM:	4 years

Discipline	Type	Hours per week L / S / Pc	CH	ST	Total	TA	ECTS
FIRST ACADEMIC YEAR							
I semester							
1. Linear Algebra and Analytical Geometry	C	2 / 2 / 0	60	90	150	E	5
2. Mathematical Analysis – I	C	2 / 2 / 0	60	90	150	E	5
3. General and Inorganic Chemistry - I	C	3 / 0 / 3	90	90	180	E	6
4. General Physics - I (mechanics)	C	3 / 2 / 3	120	150	270	E	9
5. Basis of the Chemistry	C	1 / 1 / 0	30	30	60	CA	2
6. Foreign language (Russian, English, French, German)	C	0 / 2 / 0	30	30	60	CA	2
7. Sport	C	0 / 0 /2	30	0	30	-	1
Total:		**28**	**420**		**900**		**30**

Abbreviations:
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Discipline	Type	Hours per week L / S / Pc	CH	ST	Total	TA	ECTS
II semester							
1. Mathematical Analysis – II	C	2 / 2 / 0	60	90	150	E	5
2. General and Inorganic Chemistry – II	C	3 / 0 / 3	90	150	240	E	8
3. General Physics – II (molecular physics)	C	2 / 2 / 3	105	165	270	E	9
4. Pedagogy	C	3 / 0 / 0	45	75	120	E	4
5. Stoichiometry	C	0 / 0 / 2	30	30	60	CA	2
6. Audio-Visual and Information Technologies in Tuition	C	0 / 0 / 1	15	15	30	CA	1
7. Sport	C	0 / 0 /2	30	0	30	CA	1
Total:		**25**	**375**		**900**		**30**
SECOND ACADEMIC YEAR							
III semester							
1. General Physics – III (electricity and magnetics)	C	3 / 2 / 3	120	150	270	E	9
2. Analytical Chemistry – I	C	2 / 0 / 5	105	135	240	E	8
3. General electrotechnics and radiotechnics	C	3 / 0 / 3	90	120	210	E	7
4. Mathematical methods in Physics and Chemistry – I	C	2 / 1 / 0	45	45	90	CA	3
5. Psychology	C	3 / 0 / 0	45	45	90	E	3
Total:		**27**	**405**		**900**		**30**
IV semester							
1. General Physics – IV (optics)	C	3 / 2 / 3	120	180	270	E	10
2. Analytical Chemistry – II	C	2 / 0 / 4	90	120	210	E	7
3. Physical Chemistry – I	C	3 / 0 / 3	90	120	210	E	7
4. Mathematical methods in Physics and Chemistry – II	C	2 / 1 / 0	45	45	105	E	3
5. Theoretical Physics – I (mechanics)	C	2 / 1 / 0	45	45	105	E	3
Total:		**26**	**390**		**900**		**30**

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Discipline	Type	Hours per week L / S / Pc	CH	ST	Total	TA	ECTS
THIRD ACADEMIC YEAR							
V semester							
1. Organic Chemistry – I	C	3 / 0 / 4	105	135	240	E	8
2. Physical Chemistry – II	C	3 / 0 / 4	105	135	240	E	8
3. Theoretical Physics – II (electrodynamics)	C	2 / 1 / 0	45	75	120	E	4
4. Atomic Physics	C	2 / 0 / 2	60	90	150	E	5
5. Astronomy	C	3 / 0 / 2	75	75	150	CA	5
Total:		**26**	**390**		**900**		**30**
VI semester							
1. Organic Chemistry – II	C	3 / 0 / 4	105	165	270	E	9
2. Instrumental Methods in Chemistry	C	3 / 0 / 2	75	105	180	E	6
3. Nuclear Physics	C	2 / 0 / 2	60	90	150	E	5
4. Theoretical Physics – III (quantum mechanics)	C	2 / 1 / 0	45	75	120	E	4
5. Methodology of Chemistry Education	C	2 / 0 / 0	30	30	60	-	2
6. Methodology of Physics Education	C	2 / 0 / 0	30	30	60	-	2
7. Internship in Secondary Schools (physics)	C	0 / 0 / 2	30	30	60	-	2
Total:		**25**	**375**		**900**		**30**
FOURTH ACADEMIC YEAR							
VII semester							
1. Theoretical Physics – IV (thermodynamics and statistical physics)	C	2 / 1 / 0	45	45	90	E	3
2. Methodology of Chemistry Education	C	2 / 0 / 0	30	60	90	E	3
3. Methodology of Physics Education	C	2 / 0 / 0	30	60	90	E	3
4. Chemical Technology (ICT)	C	2 / 0 / 2	60	90	150	E	5
5. Internship in Secondary Schools (chemistry)	C	0 / 0 / 4	60	90	150	CA	5
6. Internship in Secondary Schools (physics)	C	0 / 0 / 2	30	60	90	CA	3
7. Methods and Technics in School Demonstration in Chemistry	C	0 / 0 / 3	45	75	120	CA	4
8. Methods and Technics in School Demonstration in Physics	C	0 / 0 / 3	45	75	120	CA	4
Total:		**23**	**345**		**900**		**30**

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Discipline	Type	Hours per week L / S / Pc	CH	ST	Total	TA	ECTS
VIII semester							
1. Chemical Technology (OCT)	C	2 / 0 / 2	60	90	150	E	5
2. Practice Teaching (chemistry) 1 month	C	0 / 0 / 3	45	75	120	E	4
3. Practice Teaching (physics) 1 month	C	0 / 0 / 3	45	75	120	E	4
4. Elective Course (chemistry)	E	2 / 0 / 0	30	60	90	CA	3
5. Elective Course (physics)	E	2 / 0 / 0	30	60	90	CA	3
6. Facultative Course	F	2 / 0 / 0	30	30	60	CA	2
Total:		**16**	**240**		**630**		**21**
Total for study:		**196**	**2940**				**231**
State exam / Defence of a thesis paper in chemistry:							**15**
State exam / Defence of a thesis paper in physics:							**15**
TOTAL:		**196**	**2940**				**261**

The tuition finishes with:

- written state exam in chemistry or a defence of a thesis paper in chemistry
- written state exam in physics or a defence of a thesis paper in physics

ELECTIVE COURSES *:

Chemistry:

1. Coordination chemistry
2. Computer Chemistry
3. Chemistry of natural conpounds
4. Chemistry of drugs
5. Catalysis
6. Colloid chemistry
7. Environmental chemistry
8. The problems in chemistry in Secondary school
9. Quantum chemistry
10. Metrology and Statistic in Chemistry
11. Food chemistry
12. Metallography
13. Geochemistry

Physics:

1. Cosmology and Cosmochemistry
2. Computer Physics
3. Physics of Lasers
4. Sensors and sensor systems
5. The problems in physics in Secondary school
6. School Demonstration in Physics

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FACULTATIVE COURSE *:

Computer literacy, History of chemistry, Language, Philosophy

* - Each year are endorsed by the Faculty Board

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