STANDARD 1: STUDY PROGRAMME STRUCTURE

The aim of the specialist academic studies in pharmaceutical marketing and management study programme is to create professionals capable of successfully managing resources in business processes. In addition, the objective of this specialized academic study programme is to enable human resources staff to implement marketing activities, in line with the most modern methods of marketing.

The outcome of study programme is creation of competent business management and marketing professionals. Upon the completion of programme, students receive the academic degree of specialist in pharmaceutical marketing and management.

Admission requirements include completed Bachelor's and Master's studies or integrated academic studies to the extent of at least 300 ESPB points, i.e. Faculty of Pharmacy and other faculties envisaged by this programme (detailed in Standard 7). The study programme consists of compulsory courses (Pharmaceutical Management 1 and 2, Pharmaceutical marketing, Information systems and technology in pharmacy and Quality Management in Pharmacy), elective courses (E-business in Pharmacy, Communication in Pharmacy, Innovative business in Pharmacy, Negotiation and decision making in Pharmacy, Competencies and Human Resources Management in Pharmacy, Selected Chapters of Pharmacoeconomics, Selected Chapters of Pharmacoepidemiology, Social marketing and new public health), and writing a final specialist thesis. Courses are held in small groups of students and include individual (mentor) work; working methods are adapted to the number of students (lectures, consultations, seminars, etc.).

Credit value of courses: Pharmaceutical Management 1 10ESPB, Pharmaceutial Management 2 5ESPB, Pharmaceutical marketing 10ESPB, Information systems and technology in pharmacy 5 ESPB and Quality Management in Pharmacy 10 ESPB. Credit value of elective courses is 5 ESPB, and of final specialist thesis 15 ESPB.

Requirements for admission to individual courses are not envisaged. Selection the modules of other study programs is not predicted. Requirements for transfer from other study programs in the same or related field of study include passing similar courses, expressed in at least the same number of ESPB credits.

Envisaged teaching methods include lectures, practical instructions within workshops, with participation of lecturers and assistants, and also practices organized through solving specific examples which students perform independently. The study programme also envisages theoretical exercises, seminars and interactive sessions. In the framework of teaching, students have the opportunity to meet with some of the theoretical principles of the field that deals with the chosen module, the latest approaches to solving specific problems and case studies, whereby students obtain knowledge and skills relevant to the future activities in the area they specialize. Considerable attention is devoted to independent scientific research. Especially motivated students have the opportunity of directing in independent research through individual work with a mentor and involvement in scientific research. Application of computers is envisaged in all forms of teaching.

TABLES AND SUPPLEMENTS

Supplement 1.1. Faculty of Pharmacy website

Supplement 1.1a. Publication of the Faculty: Prospective students informer

STANDARD 2: PURPOSE OF STUDY PROGRAMME

The purpose of the study program Pharmaceutical management and marketing on Faculty of Pharmacy is to provide students with professional education and expertise in the field of pharmaceutical management and marketing.

Students should learn about specific areas of importance for the pharmaceutical profession, to obtain skills and methods of research in these areas and to enable to work independently in the field of pharmaceutical management and marketing. This program should create experts who are able to professionally and competently perform the work in specific pharmaceutical disciplines and to continue to improve the pharmaceutical profession.

Graduate student is able to understand the national, European and international legislation in the pharmaceutical sector and to apply them in practice. Graduate student is able to think critically, make decisions and solve problems in certain areas of the pharmaceutical profession and in line with activities for which is specialized.

TABLES AND SUPPLEMENTS

Supplement 1.1. Faculty of Pharmacy website

Supplement 1.1a. Publication of the Faculty: Prospective students informer

STANDARD 3: GOALS OF THE STUDY PROGRAMME

The primary aim of specialization studies Pharmaceutical Management and marketing is to educate professionals in the pharmaceutical sector such as pharmaceutical management and marketing. Inform of candidates with the basic principles of pharmaceutical management and marketing, information technology in pharmacy, pharmaceutical quality management, e-commerce and communications in the pharmaceutical industry, innovative business and pharmacoeconomics.

Attending the study program Pharmaceutical Management and Marketing student broadens their fundamental knowledge in these areas and, later, are able to apply them in the scope of pharmacy. Through the study program students are trained and acquire with knowledge and skills which make them coompetitive to work in the pharmaceutical industry, public pharmacies, pharmaceutical companies engaged in the marketing and all other pharmaceutical companies / institutions where they could be good managers in various areas of pharmacy.

Diplomas of specialist in this particular area will be recognized by the European institutions, allowing students to pursue further professional or scientific trainings (Ph.D.) in the field of pharmacy and related disciplines on domestic or European universities.

TABLES AND SUPPLEMENTS

<u>Supplement 1.1. Faculty of Pharmacy website</u> Supplement 1.1a. Publication of the Faculty: Prospective students informer

STANDARD 4: COMPETENCIES OF GRADUATED STUDENTS

By completing a pharmaceutical management and marketing specialist studies graduate student is acquired by professional education and becoming an expert in a particular field of pharmaceuticals such as pharmaceutical management and marketing.

The candidate should be able to apply the acquired knowledge and skills in the organization of pharmaceutical activities, critical analysis, marketing, pharmacoeconomics, the use of pharmaceutical information systems, quality management, e-business, communication in pharmacy.

The specialist is trained to understand the national, European and international legislation of certain pharmaceutical sector and is able to apply them in practice after graduation. Graduate students gain knowledge in a variety of learning methods and study and are trained to use ICT in mastering the art in this field and to present oral and written results of their work in the field. After completing studies specialists are ready for cooperation not only within the health but also the wider community. Graduate students are also ready to share knowledge with experts in similar profiles from countries in the region. The specialists are able to apply ethical principles and work flow.

By completing the program, students are acquired with the following course-specific skills: solving specific problems by using scientific methods and procedures, linking basic knowledge in various fields and their implementation, monitoring and implementation of innovations in his work.

TABLES AND SUPPLEMENTS

Supplement 4.1. Diploma supplement

STANDARD 5: CURRICULUM

During the specialist studies pharmaceutical management and marketing students are to continue to improve their knowledge, skills and abilities gained through integrated undergraduate and graduate pharmacy and related disciplines. Specialist studies in pharmaceutical management and marketing aim to train personnel for the successful management of resources in business processes. In addition, this program is aimed at training personnel in the implementation of marketing activities in line with the most modern methods of marketing. The outcome of this specialization is to train staff to deal with organizational affairs, and marketing. Specialist studies last year and are organized into two semesters. Include a total of five compulsory, one optional subject and the development of specialist work. In the first semester of study the following compulsory subjects: Pharmaceutical Management 1 (10 ECTS), Pharmaceutical Management 2 (5 ECTS), and Pharmaceutical marketing (10 ECTS). In the second semester of study are compulsory subjects Information Systems and Technology in Pharmacy (5 credits) and Quality Management in Pharmacy (10 ECTS) and one elective (elective module, 5 ECTS). Students have the opportunity to select one of the courses offered: E-business in pharmacy, Communication in pharmacy, Innovative Businesses in Pharmacy, Negotiation and Decision making in Pharmacy, Competence and human Resource management in Pharmacy, Selected Chapters of Pharmacoeconomics, Selected Chapters of Pharmacoepidemiology and Social Marketing and New Public Health. The total number of classes is 720, and passing all the exams gained total 60ECTC. The student is required to pass all the exams to curriculum specialist studies, to gain access to the preparation and defense of the final thesis, in accordance with the Statute and the Rules of the Faculty of specialist studies.

TABLES AND SUPPLEMENTS

Table 5.1. Semesters and year of studies timetablesTable 5.2. Courses specificationsTable 5.3. The study programme: list of the elective coursesTable 5.4. List of courses according to the gropus of coursesSupplement 5.1. TimetableSupplement 5.2. The book of courses (printed or electronic form at the institution website)

STANDARD 6: QUALITY, MODERNITY AND INTERNATIONAL HARMONI-ZATION OF THE STUDY PROGRAM

As part of the study program Pharmacy management and marketing specialist studies classes are implemented through relevant courses whose programs provide students with the expansion and improvement of fundamental knowledge and skills in the field of pharmacy pharmaceutical management and marketing.

Study program Pharmaceutical management and marketing, is in line with similar European programs recognized. The level of representation of certain professional areas, the scope and content of the courses offered at the study program as a way of organizing teaching is comparable with the corresponding educational programs at foreign institutions of higher education. Students are thus ensures equal participation in national and international, multidisciplinary professional research and development projects. The study program offers students the latest scientific and professional knowledge in the field of pharmaceutical management and marketing. The study program is complete and comprehensive and harmonized with other higher education programs.

The curriculum is aligned with at least three accredited programs of foreign higher education institutions, of which at least two of the higher education institutions of the European educational space:

- Studies at Kingston University London (Postgraduate study: Pharmaceutical Science with Management Studies) (Annex 6.1.) Last year. Teaching in these studies is organized in a similar manner (a few days a week). As part of these studies are taught the latest trends in the pharmaceutical industry. In addition, this program aims to educate students about the work processes that are carried out in clinical trials, manufacturing and regulatory processes similar to the program of pharmaceutical management and marketing.
- Studies at the University of Aberden, Scotland (Postgraduate study: Health Services Research). (Appendix 6.2.) were organized for 9 or 12 months. These studies are intended to enable students to conduct independent research in the field of social pharmacy and independent design projects. Study of pharmaceutical management and marketing in the same way, through a number of cases, enables students to this type of research.
- Studies of the Faculty of Medicine, University of Rijeka (Postgraduate specialist study: Health Management) (Annex 6.3.) organized through three semesters and carry a total of 90 ECTS credits. Subjects in these studies Marketing management in healthcare, The strategic management, Human resource management, Medical law and ethics, Risk management and quality Business and health information systems are largely similar in content to the subject content of the study program Pharmacy management and marketing.

The supplements 6.4.1., 6.4.2. and 6.4.3. There are documents that include recommendations for the implementation of marketing activities and marketing studies.

TABLES AND SUPPLEMENTS

Supplement 6.1,2,3. Documentation of at least three accredited international programs to which the presented study program is harmonized to

Supplement 6.4a, 6.4b, 6.4v, 6.4g. Recommendations or accordance with the representative good practices of the European institutions

STANDARD 7: STUDENT ENROLLMENT

In accordance with the needs of the specialist professional studies programs Pharmaceutical management and marketing enrolling students who meet the requirements stipulated in the Regulations of the specialized academic studies, Faculty of Pharmacy and the Regulations on the conditions, manner and procedure for admission to the second and third level studies of the University. The call for entry is open to the public. Published by the University in the media.

Number of students who enroll in an appropriate program of study shall be based on available space and human resources of higher education institutions.

The number of students enrolled in specialized studies program pharmaceutical management and marketing established the general plan for study programs of the Faculty of Pharmacy adopted by the Academic Council of the Faculty of Pharmacy, and submitted to the Chamber of the Belgrade University. University of Belgrade announced a joint call for the enrollment of students in specialist studies.

Types of knowledge, aptitude and skills that are checked typos appropriate to the nature of the study program and the way you check the character of the study program and published in the competition. Eligible for specialized studies program management and pharmaceutical marketing exercise candidates who have completed the School of Pharmacy with or without work experience and candidates of higher vocational education health profiles and other social, natural and technical profile with two years of experience in the pharmaceutical industry.

TABLES AND SUPPLEMENTS

Table 7.1. Review of the number of students being admitted to the study program

Table 7.2. Review of the number of students per year of the study program in the current school year

Supplement 7.1. Open call for the admission of applicants

Supplement 7.2. Rule book on Specialized Academic Studies

Supplement 7.3. Conditions for the enrolment of students (abstract from the institution Status or other document)

STANDARD 8: EVALUATION AND PROGRESS OF STUDENTS

Student will complete the study program Pharmacy Management and Marketing by passing the examinations, and thus acquire a certain number of ECTS, in accordance with the study programme.

Practical training or academic research will be evaluated using the specified number of points of pre-exam requirements, depending on the module. Examination in each module is defined by curriculum and module requirements. Each study module has clear and published criteria for gaining points. Way of gaining points in during the classes includes a number of points that student receives on the basis of each type of activity during the classes or pre-exam activities and exams. The success of students in mastering certain subjects continuously monitored during the classes and is expressed in points. Student can gain the points through work during the classes and by completing pre-exam requirements and exams (in writing form). The minimum number of points that a student can gain by completing pre-exam requirements during the school day is 20 and the maximum 50. The maximum number of exam points is 50. The maximum number of points that a student can achieve in the module is 100. Students mark is based on the total number of points that student earned by completing pre-exam requirements and passing the exam, according to the quality of the acquired knowledge and skills. The overall success of students is expressed as mark from 5 to 10. Every single module has a certain number of ECTS credits that the student realizes when successfully pass the exam.

Communication between teachers and students was achieved through mentoring. The students are allowed to consult with the teacher in the time allocated for consultation, to engage in the research or through seminary independently study given topic.

TABLES AND SUPPLEMENTS

Table 8.1. Collective list of points for each of the courses that the student acquires through exam prerequisites and the final exam

Table 8.2. Statistical data on the progress of students on the study program

STANDARD 9: TEACHING STAFF

For the realization of the study program of specialist studies *Pharmaceutical Management and Marketing* provided a sufficient number of teachers with the appropriate and necessary qualifications and competencies. The courses in this degree program take 11 teachers: 7 teachers were employed full-time in the institution, one teacher is employed part-time and three teachers were engaged on contract. Of the total number of teachers, three teachers with the academic rank of full professor, two teachers with associate professor, two teachers with the rank of assistant professor and one teacher was a visiting professor. Average load of teachers in the program of study is 1.95 hours per week, and the Institution 6.32 hours per week. Percentage of classes that keep teachers employed full-time is 74.22%.

The teaching part four associates all employed full-time in the institution. Average load teaching associates on the study program is 3.63 hours per week, and the Institution 112.90 hours per week.

TABLES AND SUPPLEMENTS

Table 9.1. Scientific, artistic and professional qualifications of teachers and responsibility in teaching

Table 9.2. List of teachers engaged in the study program

Table 9.3. Summary review of number of teachers in certain scientific disciplines and narrow disciplines in scientific or artistic areas

Table 9.4. List of teaching associates engaged in the study program

Supplement 9.1. Copies of work cards or work contracts of teaching staff (if accreditation of study program is required)

Supplement 9.2. The Rulebook about election of teachers (if accreditation of study program is required) Supplement 9.3. The book of teachers (with information specified in identical way as in tables from standards, if tables are not enclosed

Supplement 9.4. Evidence about public availability of information about teachers and teaching associates (publication or website of the Institution)

Supplement 9.5. Teaching load and summary review of teachers and number of classes.

STANDARD 10: ORGANIZATION AND RESOURCES

For teaching during the postgraduate specialization program - Pharmaceutical Management and Marketing at the Faculty of Pharmacy, Faculty has adequate space and equipment necessary to perform the appropriate course, classrooms and amphitheaters for teaching, library stocked with books, textbooks, manuals and scientific journals and computer lab. Within the faculty there is computer classroom and internet classroom. As a part of the IT support for students, there are available databases for electronic journals search. Necessary number of teachers, research, teaching and technical assistants are involved in the study programme.

TABLES AND SUPPLEMENTS

Table 10.1. List of rooms with areas in the faculty building in which lectures are conducted on this study program

Table 10.2. List of equipment for conducting study program

Table 10.3. List of library units which are relevant for study program

Table 10.4. List of books which are available to students on study program

Table 10.5. Literature coverage of mandatory courses (books, collections, practicum which are in libraries or in stock)

Supplement 10.1. Inventory book

Supplement 10.2. Proof of existing information technology, number of internet connections, etc.

STANDARD 11: QUALITY CONTROL

In order to perform quality control of the study program of specialization studies Pharmaceutical management and marketing, Faculty of Pharmacy ensures the implementation of established standards and procedures for evaluating the quality of the study program trough the evaluation of the program during the study as well as evaluation of competence of graduate students in order to continually monitor and improve the quality in terms of curriculum, teaching staffs, evaluation of students work, textbooks and literature.

The quality control of the study program is carried out periodically through self-evaluation (one a year) and external quality control (every three years).

The quality control of the study program provided the active participation of the students and their evaluations of program quality.

Documents on quality assurance of Faculty of Pharmacy, University of Belgrade are attached.

TABLES AND SUPPLEMENTS

Table 11.1. List of members of Commission for quality control Supplement 11.1. Report about results of self-evaluation process of the study program Supplement 11.2. Published document – Quality assurance politics Supplement 11.3. Regulations on Textbooks Supplement 11.4. Extract from the Statutes of the institution which regulates foundation and scope of work of Commission for quality assurance

STANDARD 12: DISTANCE LEARNING

The study program of specialized studies Pharmaceutical management and marketing provided for two subjects, Information systems and technology in the pharmacy, as well as an optional subject, Innovative pharmaceutical business, partly on-line studying using Moodle platform. This form of studying served as a supplement to teaching at the university in the form of setting up presentations, on-line lessons, preparation of essays, seminars, developing of active discussions on a particular topic using the forum and knowledge tests. This kind of teaching can replace only part of the teaching that takes place in the case ob mentioned subjects.