

Pharmacy education & training in the

CZECH REPUBLIC

Version 2 - 2012

PHARMINE (PHARMacy education IN Europe) is a project funded by the European Commission (LLL programme, Erasmus). Its aims and objectives are to survey the present state of pharmacy education and training in Europe, and on the basis of this survey, formulate recommendations for new competence curricula for pharmacy education and training in the EU. A model for pharmacy education and training for candidate member states and other countries will be proposed. The opportunities for a quality assurance and accreditation scheme for EU pharmacy courses will be investigated.

PHARMINE will take into account two important issues, (i) the EU directive 2005/36/EC on the recognition of professional qualifications and, (ii) the Bologna declaration. PHARMINE will focus both on recommendations for core education and training and for activities such as industrial and hospital pharmacy.

The PHARMINE consortium consists of universities which are members of the European Association of Faculties of Pharmacy (EAFP) and EU partner associations representing community, hospital or industrial pharmacy, together with the European Pharmacy Students' Association and other interested bodies.

In order to reach the objectives of the PHARMINE project, a work-plan was set up and divided into 7 work-packages (WP).

The aims and objectives of PHARMINE WP7 are to:

1. Survey European higher education institutions (HEIs)
2. Produce a databank of pharmacy education and training courses in Europe leading to core pharmacist qualifications and to qualifications required for industrial and hospital pharmacy
3. Survey to what extent the "Bologna" (based on the principles enumerated in the Bologna declaration) and the "Sectoral profession" (based on 2005/36/EC) models for pharmacy education and training are compatible.

PHARMINE WP7 will produce several documents including a WP7 survey by country. Such surveys are intended for the use of students and staff interested in mobility and/or contacts with the country in questions as well as educationalists working on pharmacy education and training in Europe.

(see:

<http://enzu.pharmine.org/media/filebook/files/PHARMINE%20WP7%20survey%20of%20European%20HEIs%200309.pdf>)

Validation of the first version 2010:

This document was validated by the Czech Chamber of Pharmacists.
Prague 7. 12. 2010



Signature and seal

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Index

| | Page |
|--|-------------|
| Summary | 7 |
| Introduction | 8 |
| Chapter 1. Organization of the activities of pharmacists, professional bodies | 10 |
| Chapter 2. Pharmacy HEIs, students and courses | 14 |
| Chapter 3. Teaching and learning methods | 17 |
| Chapter 4. Subject areas | 18 |
| Chapter 5. Impact of the Bologna principles | 19 |
| Chapter 6. Impact of EC directive 2005/36/EC | 20 |
| The Czech scheme for pharmacy education and training. | 21 |

Summary.

Czech Community pharmacies provide sale and counselling of Rx and OTC medicines as well as some diagnostic services (such as taking blood pressure).

Graduated pharmacists (pharmacist is *lékárník* in Czech) study for five years and graduate as Magister (Mgr., equivalent to MPharm). A Mgr. diploma is the only requirement for registration as a pharmacist. Pharmacists can own and manage community pharmacies and work as responsible pharmacists in either community or hospital pharmacies. All practising pharmacists must be registered with the Czech Chamber of Pharmacists.

The ownership of community pharmacies is not restricted to members of the pharmacy profession and the majority of pharmacies are organized in various pharmacy chains.

There are two Universities providing higher education in pharmacy in the Czech Republic: Charles University of Prague with its Faculty of Pharmacy in Hradec Králové (established in 1969) and the University of Veterinary and Pharmaceutical Sciences Brno with its Faculty of Pharmacy located in Brno (established in 1991). At both Universities the pharmacy curriculum is organized as a seamless fully integrated Master Degree course (a bachelor degree does not exist). The pharmacy curriculum comprises 6 months of university-supervised traineeship taking place in the fifth year of study. The pharmacy curriculum is organized in accordance with the EU directive 2005/36/EC.

Currently no specialization courses are available at the university level in the Czech Republic. Specialisation in various forms of pharmaceutical disciplines is organized as CPD/LLL by the Czech Chamber of Pharmacists and it is realized by the "IPVZ" (Institute of Postgraduate Education for Health Professions) at the postgraduate level.

Introduction.

Statistics for Czech Republic

Total population: 10,189,000

Gross national income per capita (PPP international \$): 20,920

Life expectancy at birth m/f (years): 73/80

Healthy life expectancy at birth m/f (years, 2003): 66/71

Probability of dying under five (per 1 000 live births): 4

Probability of dying between 15 and 60 years m/f (per 1 000 population): 148/67

Total expenditure on health per capita (Intl \$, 2006): 1,490

Total expenditure on health as % of GDP (2006): 6.8

Detailed information is available at: World Health Statistics 2009:

<http://www.who.int/whosis/whostat/2009/en/index.html>

Highlights on health in the Czech Republic.

(Information source: Ministry of Health of the Czech Republic, <http://www.mzcr.cz/En/#>)

The major principles underlying the pillars of the national health service of the Czech Republic are: (i) Solidarity (solidarity between healthy people and the sick is fostered in health care systems by separation between the provision of health care and its financing). Solidarity of the economically active with the economically inactive people means that every insured person pays an insurance premium as a percentage of their income regardless of what health care they receive or will receive; (ii) Multisource financing with major share of public health insurance (health care is funded from public health insurance, direct payments, the national budget and regional budgets). The public health insurance system of the Czech Republic is based on three interconnected pillars – insured person (person insured under the Act on public health insurance) – health care facility (authorized to provide health care) – health insurer (institution with which the insured person is insured); (iii) Equal availability of health care for all insured persons (the health care system strives to create conditions in which there are no differences in the availability of health care for whole population); (iv) Obligatory vaccination against infectious diseases.

Health care is provided in health care facilities. If a situation requires so, it may be provided elsewhere. Health care is provided by health personnel within the scope of their qualification. The essential condition for the provision of reimbursed health care is that it must be provided in a health care facility which has a contract with the patient's insurer. If essential and urgent health care is needed, it may be provided in exceptional circumstances by a health care facility which does not have a contract with the patient's insurer. An exception to this rule is a pharmacy because an insured person can ask for a medicament at any pharmacy regardless of the existence of its contract with the insured person's insurer. A prescription must be issued, however, in case of other than urgent health care by a

physician who has a contract with the insured person's insurer. Within the public health insurance system, health care is reimbursed by the insurer on the basis of its contract with the health care facility.

There are many procedures which insured persons co-finance. These are procedures or medical devices provided outside the legal framework. Some cases in point are dental procedures, some balneological care and some medicaments. Some medicaments are reimbursed in full by insurance companies whereas some are co-financed by the patients. In every category of medicaments there must be at least one reimbursed in full by an insurer. Costs of medicaments and medical devices during hospitalization are reimbursed in full by the insurer and the insured person does not pay directly.

An overview of the most important legislation:

- Resolution of the Presidium of the Czech National Council 2/1993 promulgating the Charter of Fundamental Rights and Freedoms as part of the Czech constitutional order
- Act 20/1966 Coll., on public health care, amending some related laws
- Act 48/1997 Coll., on public health insurance, amending some related laws
- Act 592/1992 Coll., on premiums for general health insurance, amending some related laws
- Act no. 258/2000 Coll., on public health protection and amendments to several related acts, as amended

Chapter 1. Organization of the activities of pharmacists, professional bodies

| | Y/N, number or % | If you wish to expand your answer, please add your comments below. |
|--|-----------------------|---|
| Community pharmacy | | |
| Community pharmacists | 6000 | |
| Community pharmacies | 2420 (+251 sub units) | Pharmacists/pharmacy: 2.1 Inhabitants/pharmacy: 3846 |
| Competences and roles of community pharmacists | | <ol style="list-style-type: none"> 1. Supplying prescription and OTC medicines and medical devices, 2. Giving advice on medicines and lifestyle, 3. Compounding of medicines, 4. Keeping records (registration) of narcotic drugs, 5. Ordering of medicines, 6. Services to nursing and care homes, 7. Blood pressure and glycaemia monitoring, 8. Patient counselling service – individual consultations of drug-related problems 9. Supplying prescriptions for wards in health care facilities 10. Reporting of ADR. |
| Is ownership of a pharmacy limited to pharmacists? | No | Any physical or juristic person has legal right to own a public pharmacy. http://portal.gov.cz/wps/portal/_s.155/701?kam=zakon&c=160/1992 |
| Rules governing the distribution of community pharmacies? | No | |
| Are drugs and healthcare products available to the general public by channels other than pharmacies? | Yes | Veterinary doctors, Medical devices shops, Medical emergency http://www.sagit.cz/pages/sbirkatxt.asp?sn=y&hledany=o+!%E9%E8ivech&zdroj=sb03269&cd=3&typ=r |
| Are persons other than pharmacists involved in community practice? | Yes | |
| Their titles and number(s) | 4600 | Assistant pharmacists, in Czech " <i>Diplomovaný Specialista</i> " DiS |
| Organisation providing and validating the E&T | | Medical Colleges and Secondary Medical Schools completed by passing the final exam called the <i>Absolutorium</i> |
| Duration of studies (years) | 3 | |
| Subject areas | | English or German, Latin, Information and Communication Technologies, Chemistry and Biochemistry, Psychology and Communication, Health Education, Anatomy and Physiology, Microbiology and Hygiene, Human Nutrition, Pharmaceutical Botany, Analysis of Drugs, Pharmacology, Compounding of Medicines, Laboratory Technology, First Aid, Pathophysiology and Pathology, Pharmacognosy, Pharmaceutical Chemistry, Basics of Radiology, Pharmacy Practice, Public Health Care, Dispensing, Medical Devices, Practical Training |
| Competences and roles | | <ol style="list-style-type: none"> 1. Supplying OTC drugs, 2. Medical devices and other health products, 3. Compounding of medicines, |

| | | |
|---|-----|--|
| | | <p>4. Intake and storage of deliveries, 5. Expiry and storage monitoring.</p> |
| Hospital pharmacy | | |
| Does such a function exist? | Yes | <p>The legislation covers:</p> <ul style="list-style-type: none"> - the area of state-owned hospitals (and hospital pharmacies) - list of pharmaceutical specializations including hospital pharmacy - specialization curricula incl. hospital pharmacy |
| Hospital pharmacists | 430 | (4/2012) |
| Hospital pharmacies | 93 | (4/2012) |
| Competences and roles of hospital pharmacists | | <ol style="list-style-type: none"> 1. Supplying of prescription medicines for wards and outpatient clinics 2. Clinical pharmacy consulting, 3. Compounding of medicines for wards and outpatients, 4. Production of patient-specific medicines (e.g. cytotoxic preparations, all-in-one sterile bags), 5. Supplying of specialised individual medical devices for patients and medical materials for wards, 6. Supplying and check of raw materials for the pharmacy and specialised laboratories of the hospital, 7. Supplying and evidence of narcotic drugs, 8. Adverse effects reporting, 9. Participation in clinical drug evaluation (safety and efficacy) 10. Patient counselling service – individual consultations of drug-related problems 11. Information service for healthcare professionals |
| Pharmaceutical and related industries | | |
| Number of companies with production, R&D and distribution | 228 | There are 228 licensed distributors in the Czech Republic. There are no reliable sources to divide the producers and distributors according to the mentioned groups. |
| Companies producing generic drugs only | | Zentiva (http://www.zentiva.com/default.aspx/en) Teva Pharmaceutical Industries Ltd. (http://www.tevapharm.com/) |
| Industrial pharmacy | | |
| Number of pharmacists working in industry | 15 | These are only persons registered with the Czech Chamber of Pharmacists; there are possibly much more but this number is not known since they need not be registered with the Czech Chamber of Pharmacists |
| Competences and roles of industrial pharmacists | | <ol style="list-style-type: none"> 1. Preclinical drug evaluation (safety and efficacy), 2. Clinical drug evaluation (safety and efficacy), 3. Research, 4. Technology, 5. Management, 6. Marketing, Control, 7. Production, 8. Development, 9. Business |
| Other sectors | | |
| Number of pharmacists working in other sectors | 43 | These are only persons registered with the Czech Chamber of Pharmacists; there are possibly much more but this number is not known since they need not be registered with the Czech Chamber of Pharmacists |
| Sectors in which pharmacists are employed | | <ol style="list-style-type: none"> 1. Armed forces, 2. Secondary school E&T , 3. Universities, 4. National health services, 5. SUKL (State Institution of Drug Control: registration of drugs - www.sukl.cz), 6. IKEM (Institute of Clinical and Experimental Medicine – clinical trials - |

| | | |
|--|-----|--|
| | | www.ikem.cz), 7. Laboratories (research, production, control, development), 8. Distribution, 9. Sales management and marketing |
| Competences of pharmacists employed in other sectors | | Education and Training, Research, Management, Control, Production, Consulting, Drug evaluation and registration |
| Roles of professional associations | | |
| Registration of pharmacists | Yes | Registration with the Czech Chamber of Pharmacist (http://www.lekarnici.cz/) is compulsory for all practising pharmacists. |
| Creation of community pharmacies and control of territorial distribution | No | Territorial distribution of pharmacies is not regulated. Any physical or juristic person has legal right to open a new pharmacy but it must receive a licence from a regional District Office. |
| Ethical and other aspects of professional conduct | Yes | The Ethical Code of The Czech Chamber of Pharmacists is valid since 2005. http://www.lekarnici.cz/O-CLnK/Rady/Etický-kodex-Ceske-lekarnicke-komory-(H-6).aspx |
| Quality assurance and validation of HEI courses for pharmacists | Yes | A representative of the Czech Chamber of Pharmacists is a member of the Scientific Council of the Faculty of Pharmacy that approves any changes in the Pharmacy curricula. |
| Other (please specify) | | <p>The Czech Chamber of Pharmacists is an independent, non-political, autonomous professional organization responsible for the interests, the professionalism, the ethics and the honour of the pharmaceutical profession. The law prescribes obligatory membership in the Chamber for all pharmacists practising in pharmacies in the Czech Republic.</p> <p>The Czech Chamber of Pharmacists:</p> <ol style="list-style-type: none"> 1. ensures that its members exercise their profession in conformity with the highest professional standards, as well as with the principles of medical ethics and within the law; 2. Serves as the guarantor of professionalism on the part of its members and certifies the fulfilment of the requirements for the practice of medicine; 3. Reviews and defends the rights and the professional 4. Defends the professional honour of its members; 5. Maintains the register of its members. <p>The Chamber is entitled to:</p> <ol style="list-style-type: none"> 1. Participate in negotiations concerning the price lists for pharmaceuticals; 2. Take part in competition proceedings to fill leading positions in the health care sector; 3. Establish requirements for practice by its members ; 4. Investigate malpractice complaints filed against its members; 5. Issue opinions on the conditions and forms of the Continuing Education of Pharmacists; 6. Participate in specialisation exams. <p>For more information see the web site: http://www.lekarnici.cz</p> |

| References | |
|--|---|
| References to texts and articles of national law | <ol style="list-style-type: none"> 1. Czech Pharmacopoea 2009 and previous including the Supplements – GRADA Publishing 2. SUKL (State Institution of Drug Control) Official Journals and Regulations - www.sukl.cz 3. Czech Republic Statutes at Large 4. Czech Republic Ministry of Health Official Journals and Directives 5. Health Insurance Institutions rules – www.vzp.cz for example 6. Constitutional Code No. 1/1993 7. Code No. 40/1964 , Civil Code 8. Code No. 513/1991 , Business Law 9. Code No. 65/1965 , Labour Code 10. Code No. 140/1961 , Punity Law 11. Code No. 378/2007, Law on Drugs 12. Council Directive 89/105/EEC, of 21 December 1988, relating to the transparency of measures regulating the pricing of medicinal products for human use and their inclusion within the scope of national health insurance systems <p>Links to all important Czech laws relevant to all aspects of Pharmaceutical care can be found at the website (http://www.lekarnici.cz/)</p> |
| Bibliographic references (EU, national, international) | <ol style="list-style-type: none"> 1. Český lékopis, Praha, Grada Publishing, actual edition 2. Journals – Časopis českých lékárníků, Praktické lékařství, Zdravotnické noviny 3. Smečka V., Rusek V., Kolář J.: Lékařství I., 1. vyd., VFU, Brno 2008 4. Kolář J., Smečka V.: Lékařství II, 1.vyd., VFU, Brno, 2008 5. Solutio-příruční kniha pro lékárny, Praha, Medon 1996-2004 6. Lenka Práznovcová, Ladislav Strnad: Farmakoekonomika pro lékaře, farmaceuty a manažery zdravotnických zařízení, Maxdorf, ISBN80- 7345-048-8. 7. Lenka Práznovcová, Ladislav Strnad: Zdraví,zdravotnictví a léková politika v ČR a v zemích EU, Nakladatelství Maxdorf, ISBN 80 – 80-7345 – 075 – 5. |

Chapter 2. Pharmacy HEIs, students and courses

| | Y/N, number or % | If you wish to expand your answer, please add your comments below. |
|---|------------------------|--|
| Total number of HEIs in your country | 2 | The two HEIs are: Charles University in Prague, Faculty of Pharmacy in Hradec Králové (FPCU) (www.faf.cuni.cz) The University of Veterinary and Pharmaceutical Sciences Brno, Faculty of Pharmacy (FPVPU) (http://faf.vfu.cz/) |
| Public | 2 | |
| Independent faculty | Yes | |
| Do HEIs offer B + M degrees? | No | Only M degree , B degree does not exist |
| Czech Republic | | |
| Teaching staff | | |
| Number of teaching staff (nationals) | 190 | FPCU + FPVPU |
| International teaching staff (from EU MSs) | 7 | (from Slovakia, only at FPVPU) |
| International teaching staff (non EU) | 0 | |
| Professionals from outside the HEIs, involved in E&T | 50 | Community and hospital pharmacists involved in traineeship, management persons from pharmaceutical industry, psychologists, economic experts |
| Students | | |
| Places at entry following secondary school | 430 | 270 FPCU, 160 FPVPU |
| Number of applicants for entry | | 890 FPCU, 940 FPVPU 4.3 applicants per place |
| Number of graduates that become registered/professional pharmacists. | 280 | Data from the acad. year 2009/10. 25 to 30% of students drop out during the five years of study and about 90% of those graduated become registered pharmacists (the remaining about 10% do not work in pharmacies and need not be registered with the Czech Chamber of Pharmacists). |
| International students (from EU member states) | 350 | 210 (from Slovakia; do not have to learn Czech since Slovak and Czech languages are very similar), 140 (from Greece; Pharmacy courses in English) |
| Number of international students (non EU) | 26 | 24 FPCU (USA, Canada, Kenya, Kosovo, Moldova (Pharmacy courses in English); Belarus, Croatia, Ukraine, Mongolia, Vietnam, Kazakhstan, Russia, Israel (Pharmacy courses in Czech)); 2 FPVPU (Yemen, Syria (Pharmacy courses in Czech)) |
| Entry requirements (beginning of S1 of B1, following secondary school) | | |
| Specific pharmacy-related, national entrance examination | No | Generally, secondary school students that have completed their secondary school education with General Certificate of Secondary Education are eligible to apply for admission to any University |
| Fees per year: | | |
| For home student | | No tuition fee for courses in Czech. |
| For EU MS students | | No tuition fee for courses in Czech. 6800 EUR (FPCU) or 6700 EUR (FPVPU) for courses in English |

| | | |
|---|----------------|--|
| For non EU students | | No tuition fee for courses in Czech. 6800 EUR (FPCU) or 6700 EUR (FPVPU) for courses in English |
| Length of course | 5 years | |
| Specialization | | |
| Do HEIs provide specialized courses? | No | Specialization training lasts 4 years, includes <ul style="list-style-type: none"> - 4 year practice in pharmacy with at least 2 years in hospital pharmacy - Several theoretical courses focused on pharmacotherapy, legislation, hospital pharmacy technologies etc. - Practical training at accredited hosp. pharmacies (compounding, sterile preparations, cytotoxics compounding and handling, quality assurance) - each aspirant has to pass two tests during training - Each applicant has to write out and submit a thesis (within the scope of hospital pharmacy) - Pass the board examination to obtain the specialization diploma in hospital pharmacy. |
| Have there been any major changes since 1999? | Yes | Transfer to ECTS and introduction of 6-months practical training in the 5th year |
| Charles University | | |
| Teaching staff | | |
| Number of teaching staff (nationals) | 102 | 16 Full Professors, 45 Associate Professors, 41 lecturers |
| International teaching staff (from EU MSs) | 0 | |
| International teaching staff (non EU) | 0 | |
| Number professionals from outside the HEIs, involved in E&T | 32 | Community and hospital pharmacists involved in traineeship, management persons from pharmaceutical industry, psychologists, economic experts |
| Students | | |
| Number of places at traditional entry (beginning of S1 of B1, following secondary school) | 270 | Data from the acad. year 2010/11. Information about the admission procedure at http://www.faf.cuni.cz/studium/prijimaci_rizeni/bakalarske_magisterske/20112012/Stranky/default.aspx |
| Number of applicants for entry | 1273 | Data from the acad. year 2012/2013 |
| Number of graduates that become registered/professional pharmacists. | 200 | Data from the acad. year 2009/10. 25 to 30% of students drop out during the five years of study and about 90% of those graduated become registered pharmacists (the remaining about 10% do not work in pharmacies and need not be registered with the Czech Chamber of Pharmacists). |
| International students (from EU member states) | 190 | 70 from Slovakia (do not have to learn Czech since Slovak and Czech languages are very similar) and 120 from Greece (Pharmacy courses in English). (Data from 2010/11) |
| International students (non EU) | 24 | (USA, Canada, Kenya, Kosovo, Moldova (Pharmacy courses in English); Belarus, Croatia, Ukraine, Mongolia, Vietnam, Kazakhstan, Russia, Israel (Pharmacy courses in Czech)); (Data from 2010/11) |
| Entry requirements (beginning of S1 of B1, following secondary school) | | |
| Specific pharmacy | Yes | Written tests in biology, chemistry and physics and a general IQ test |

| | | |
|---|---------------------|--|
| entrance examination | | |
| Fees per year | | |
| For home students | | No tuition fee for courses in Czech. |
| For EU MS students | Amount (€): 6800 | No tuition fee for courses in Czech. 6800 EUR for courses in English. |
| For non EU students | Amount (€): 6800 | No tuition fee for courses in Czech. 6800 EUR for courses in English. |
| Length of course | 5 | |
| Specialization | | |
| Does your HEI provide specialized courses? | No | |
| Past and present changes in E&T | | |
| Have there been any major changes since 1999 at your HEI? | Yes | Transfer to ECTS and introduction of 6-months practical training in the 5th year |
| Are any major changes envisaged before 2019 at your HEI? | Yes | If required by new EU directives |
| Is your HEI typical of all HEIs in the country? | Yes | |

| | |
|--|---|
| References | |
| References to texts and articles of national law | Web site: http://app.edu.cz/portal/page?_pageid=33,274837&_dad=portal&_schema=PORTAL providing: information about the educational system in the Czech Republic as well as study and educational opportunities not only in the Czech Republic but throughout the whole of Europe; links summing up the legislation regulating education in the CZ (the current wording of the School Act, Higher Education Act, Act on Pedagogical Workers and the White Book - etc.); various documents from the area of education and training; publications from the area of the school system; selected documents relating to international activities. |

Chapter 3. Teaching and learning methods

The Pharmacy curriculum is available in English at:

<http://www.faf.cuni.cz/en/study/undergraduate/pharmacy/StudyProgram/Pages/default.aspx>

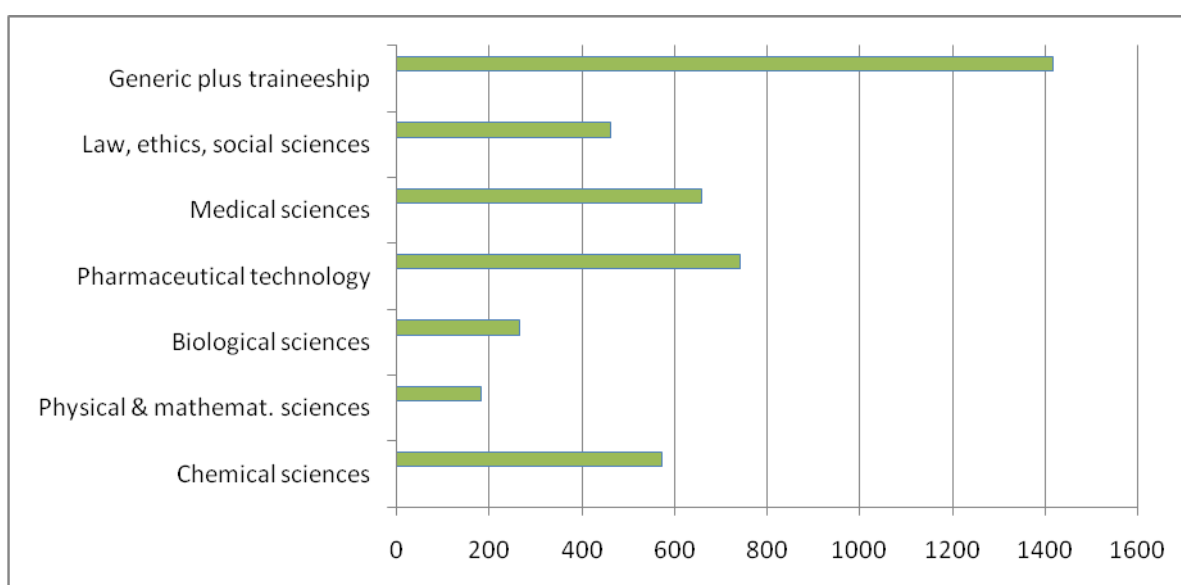
| Student hours | | | | | | |
|--|------------|------------|------------|------------|-------------|-------------|
| Method | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
| HEIs courses | | | | | | |
| Lecture | 364 | 350 | 322 | 378 | 0 | 1414 |
| Tutorial | 84 | 182 | 154 | 140 | 0 | 560 |
| Practical | 280 | 252 | 196 | 98 | 0 | 826 |
| Project work | 0 | 0 | 0 | 168 | 252 | 420 |
| Traineeship | | | | | | |
| Hospital | 0 | 0 | 0 | 0 | 0 | |
| Community | 40 | 0 | 0 | 0 | 960 | 1000 |
| Industrial (academic or industrial) | 0 | 80 | 0 | 0 | 0 | 80 |
| Other (please specify) | 0 | 0 | 0 | 0 | 0 | |
| <i>Subtotal</i> | <i>768</i> | <i>864</i> | <i>672</i> | <i>784</i> | <i>1212</i> | <i>4300</i> |
| Electives | | | | | | |
| Choice | 112 | 56 | 84 | 0 | 0 | 252 |
| Optional | 0 | 0 | 84 | 64 | 0 | 148 |
| Total | 880 | 920 | 840 | 848 | 1212 | 4700 |

Chapter 4. Subject areas

Student hours

| Subject area | Year 1 | Year 2 | Year 3 | Year 4 | Subtotal | Subtotal % | Year 5 | Total |
|--------------|--------|--------|--------|--------|----------|------------|--------|------------|
| CHEMSCI | 168 | 308 | 42 | 56 | 574 | 17 | 0 | 574 |
| PHYSMATH | 168 | 0 | 14 | 0 | 182 | 5 | 0 | 182 |
| BIOLSCI | 168 | 98 | 0 | 0 | 266 | 8 | 0 | 266 |
| PHARMTECH | 0 | 0 | 406 | 336 | 742 | 22 | 0 | 742 |
| MEDISCI | 56 | 280 | 196 | 126 | 658 | 19 | 0 | 658 |
| LAWSOC | 140 | 28 | 112 | 182 | 462 | 13 | 0 | 462 |
| GENERIC | 196 | 168 | 28 | 168 | 560 | 16 | 856 | 1416 |
| | | | | | 3444 | | | |

Hours by subject area



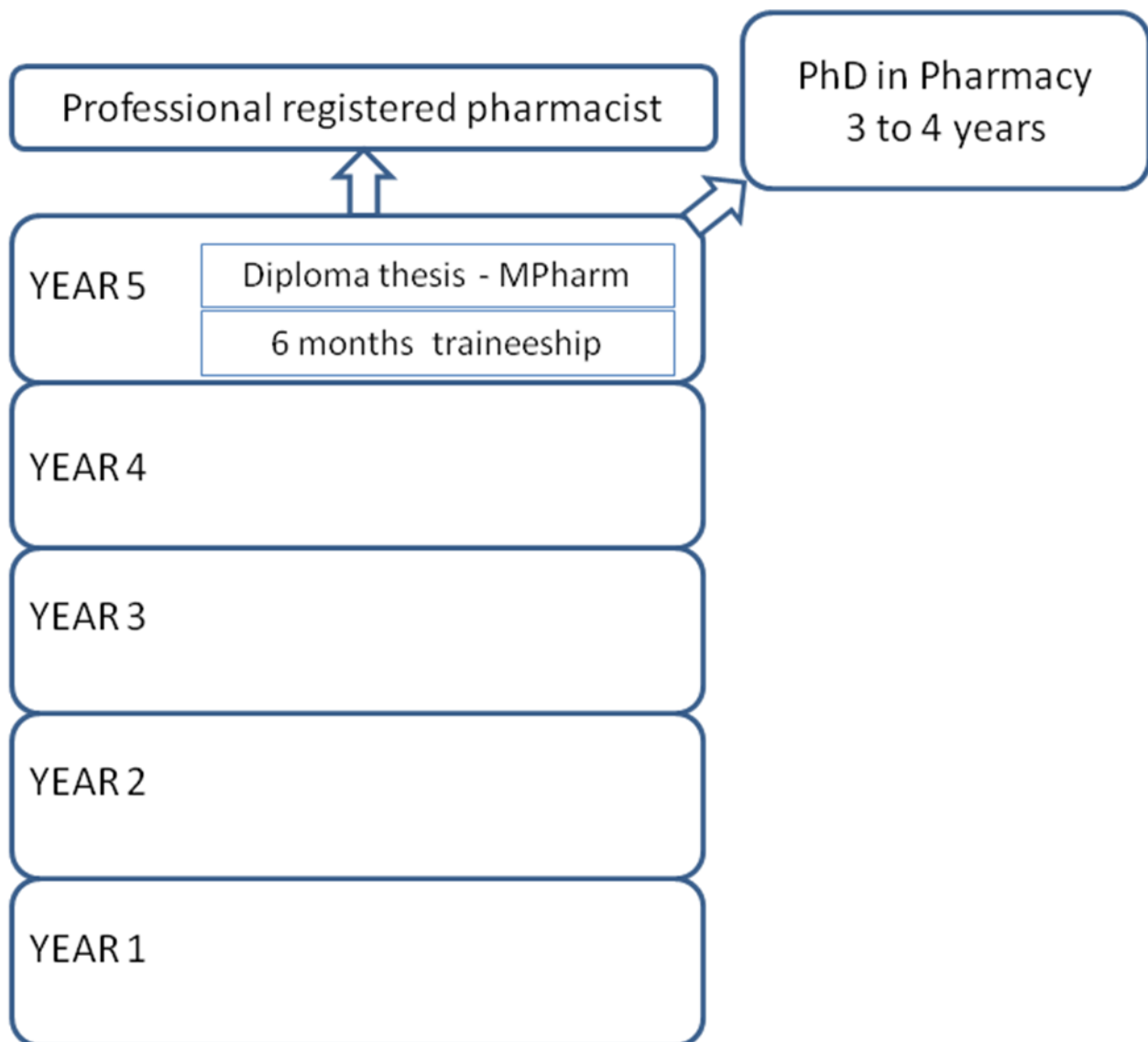
Chapter 5. Impact of the Bologna principles

| Bologna principle | Is the principle applied? Y/N or partially | How is it applied? Does your HEI have multilateral recognition and agreements? Other comments. |
|---|---|--|
| 1. Comparable degrees / Diploma Supplement | Yes | |
| 2. Two main cycles (B and M) <u>with entry and exit at B level</u> | No | |
| 3. ECTS system of credits / links to LLL | Yes | Since the academic year 2006/2007 |
| 4. Obstacles to mobility | No | We offer parallel Pharmacy study programme in English for incoming international students. Incoming Erasmus students receive certain financial support from Czech Ministry of Education to cover part of expenses for accommodation. Outgoing Erasmus students receive about 250 EUR per month financial support from the Czech Ministry of Education. |
| 5. European QA | Yes | The University and Faculty study programmes are regularly accredited by the Accreditation Commission of Czech Republic which is a full member of ENQA. |
| 6. European dimension | Yes | The Faculty of Pharmacy, Charles University, has an agreement on co-supervision in PhD course with Faculty of Pharmacy, University of Coimbra, Portugal. |
| ERASMUS staff exchange to your HEI from elsewhere | Staff months: 1 | Portugal, Italy, Sweden |
| ERASMUS staff exchange from your HEI to other HEIs | Staff months: 2 | Portugal, Spain, Germany Sweden |
| ERASMUS student exchange to your HEI from elsewhere | Student months: 120 | Portugal, Spain, Lithuania, Italy |
| ERASMUS student exchange from your HEI to other HEIs | Student months: 160 | Germany, Sweden, Slovenia, Italy, Portugal, Finland,. Norway, Ireland |

Chapter 6. Impact of EC directive 2005/36/EC

| The directive states | How does / will this directive statement affect pharmacy E&T? | If you wish to expand your answer, please add your comments below. Do you consider the directive statement valid? If not how would you change it? |
|---|---|---|
| “Evidence of formal qualifications as a pharmacist shall attest to training of at least <u>five years' duration</u> ...” | Comply with | |
| “ <u>...four years of full-time theoretical and practical training at a university or at a higher institute of a level recognised as equivalent, or under the supervision of a university;</u> ” | Comply with | |
| “ <u>...six-month traineeship in a pharmacy which is open to the public or in a hospital, under the supervision of that hospital's pharmaceutical department.</u> ” | Comply with | We would prefer compulsory 4 months in community or hospital pharmacy for all students plus 2 months either in industry (for those that plan to go to industry after graduation) or additional 2 months in a pharmacy for those planning to work in a pharmacy. |
| “The balance between theoretical and practical training shall, in respect of each subject, give <u>sufficient importance to theory to maintain the university character of the training.</u> ” | Comply with | |
| Directive annex | | |
| V.6. PHARMACIST 5.6.1. Course of training for pharmacists Plant and animal biology / Physics / General and inorganic chemistry / Organic chemistry / Analytical chemistry / Pharmaceutical chemistry, including analysis of medicinal products / General and applied biochemistry (medical) / Anatomy and physiology; medical terminology / Microbiology / Pharmacology and pharmacotherapy / Pharmaceutical technology / Toxicology / Pharmacognosy / Legislation and, where appropriate, professional ethics. | Comply with | |

The Czech Pharmacy education and training scheme



The scheme is the same for the whole country (FPCU and FPVPU)



Education and Culture DG

Lifelong Learning Programme

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PHARMINE

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