

Pharmacy education & training in

AUSTRIA

Version 2 - 2012



PHARMINE
*Pharmacy Education
in Europe*

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>)

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All the data and information provided in this document have been provided to the best of the knowledge of the authors. Any comments and suggestions will be welcomed: jeffrey.atkinson@univ-lorraine.fr

This v2 version was produced in October 2012.

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Summary.

There are 3 HEIs in Austria that deliver pharmacy education and training: Vienna, Graz and Innsbruck.

Studies at the university last 4.5 years; this is followed by 1 year of postgraduate traineeship that is obligatory for community pharmacists.

There is no specific pre-graduate specialisation in hospital pharmacy. There are some courses for future industrial pharmacists such as that for qualified persons in Vienna.

The postgraduate traineeship is obligatory for all graduates in Austria who aim at working in a pharmacy, no matter if this is a community pharmacy or a hospital pharmacy. The traineeship can either be done in a community pharmacy or a hospital pharmacy. However, the number of hospital pharmacies in Austria offering traineeships is limited. Therefore, the majority of traineeships by graduates are completed in community pharmacies.

Whilst there is no pre-graduate specialisation in hospital pharmacy, there is a post-graduate specialisation in hospital pharmacy offered by the Austrian Chamber of Pharmacy (in German: *Weiterbildung zum Krankenhausfachapotheker*). This specialisation has to be done while working in a hospital pharmacy, lasts three years and comprises training on the job, special courses on various hospital pharmacy topics, and a scientific project and thesis. The specialisation ends with the degree of 'Approved Hospital Pharmacist (aHPh)'.

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

	Y/N, number or %	Comments
Community pharmacy		
Number of community pharmacists	5,385	As of 31.12.2011
Number of community pharmacies	1,292 community pharmacies 24 branches	As of 31.12.2011
Competences and roles of community pharmacists		<p>Competences include:</p> <ol style="list-style-type: none"> Individual preparation of medicine Dispensing of medicines Customer counselling on application of medicinal prescriptions and on choice and use of self-medication medicines Addictive drug substitution programs Some delivery of urgently required medicines Standby duty at night and weekends <i>etc.</i> <p>Every single pharmacy in Austria offers healthcare services beyond compare. With no appointment necessary and without bureaucracy, pharmacies work non-stop from 8 a.m. to 6 p.m. giving healthcare advice to the customers. Outside of regular opening hours, anyone who needs pharmaceutical advice or important medicine will find one of Austria's 300 on-duty pharmacies nearby. Even during the night, on Sundays and public holidays, pharmacies offer the same competent and reliable services. Austria's pharmacies meet their mandate to supply medicines to the population in the form of 390,000 customer contacts each and every day. Giving expert advice about medicines is one of pharmacists' core competencies. Pharmacists explain to patients how to take and use the medicines prescribed by their doctor correctly, what the proper dosage of the medicines is, and what effects, adverse effects and interactions it may cause.</p> <p>In addition to expert advice, pharmacists offer health checks (e.g. blood pressure, blood sugar, cholesterol etc.) as a service to the general population</p> <p>Pharmaceutical preparation remains one of the core services of community pharmacies. Some medicines are often not available in the right dose, for example for newly born and young children. The pharmacists fill this gap and provide patients with custom-made medicines.</p> <p>Austrian pharmacies have been successfully involved in substitution treatment of drug addicts as an important partner for many years. Every pharmacy is obliged to accept patients undergoing drug replacement</p>

		therapy. Despite of the rapid increase of the number of patients and the complex dispensing procedure (dispensing out in daily dose, documentation, administrative expenses etc.) pharmacies perform this service to everyone`s satisfaction.
Is ownership of a community pharmacy limited to pharmacists?	Yes	Only a pharmacist can own and manage a pharmacy. However partnerships are possible but the pharmacist must own at least 51 %. No pharmacist is granted more than one license to operate or manage a pharmacy.
Rules governing the geographical distribution of pharmacies?	Yes	There must be a minimum distance of 500 meters to the next existing pharmacy and the requirement that each of the existing neighbouring pharmacies still has a potential of at least 5,500 people to supply
Are drugs and healthcare products available by other channels ?	No	All medicines may only be sold in pharmacies, with the exception of products in the delimitation ordinance (<i>Abgrenzungsverordnung</i>) (herbal teas and natural medicines) which may be sold outside the pharmacy. The ban on the mail-order sale of medicines still remains but there are intentions to change them in the near future.
Are persons other than pharmacists involved in community practice?	Yes	<ul style="list-style-type: none"> • Pharmaceutical-commercial assistant • Support personnel like cleaning staff
Their titles and number(s)	5.961	Number for pharmaceutical-commercial assistants
Organisation providing and validating the E&T		Community pharmacy and vocational college
Duration of studies (years)		3 years after compulsory school 2 years for a high-school graduate
Subject areas		Basic modules in chemistry and in physics, healthcare, hygienic, management, economics, bookkeeping etc.
Competences and roles		Commercial and pharmaceutical duties
Hospital pharmacy		
Number of hospital pharmacists	304	There are 304 hospital pharmacists working in 46 hospital pharmacies in Austria. Only 16.7% of all hospitals operate their own hospital pharmacy (<i>Apotheke in Zahlen 2012, Austrian Chamber of Pharmacy</i>).
Competences and roles of hospital pharmacists		<p>The competences and roles of hospital pharmacists are defined by the <i>Law on how to operate a pharmacy</i>, which is an ordinance to the <i>Austrian Medicines Act</i>:</p> <ul style="list-style-type: none"> ☑ Provision of drugs, medical devices and further hospital-relevant goods (e.g. diagnostics, chemicals, reagents, etc.) <ul style="list-style-type: none"> o Distribution of drugs, medical devices and further hospital-relevant goods o Patient-specific compounding of individual prescriptions o Checking of prescriptions according to clearness and legal requirements o Stock production o Inspection of drug storages on wards and other hospital units ☑ Pharmaceutical services <ul style="list-style-type: none"> o Patient-oriented services – clinical pharmacy services o Collaboration to ensure optimal, rational and safe pharmacotherapy o Recommendations to ensure prescribing in the ambulatory care sector

		<p>according to economic guidelines</p> <ul style="list-style-type: none"> o Pharma-Economics and pharmaceutical controlling o Information and counselling o Co-working in commissions and working groups o Hospital pharmacists are members of ethics committees. o Hospital pharmacists collaborate to clinical trials.
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Roles of professional associations		
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Registration of pharmacists	Yes	All pharmacists working in a community or hospital pharmacy are Members of the Austrian Chamber of Pharmacists. Membership of the Chamber is compulsory by law.
Creation of community pharmacies and control of territorial distribution	Yes	Article 67-77 of the Regulation on the Operation of Pharmacies (<i>Apothekenbetriebsordnung</i> ABO) states that pharmacies are to be checked before their start operating and after that at least every five years by the local authority. This control has to do with the pharmacy premises and equipment as well as the products manufactured and stored in the pharmacy. This way the high quality of the pharmacies themselves and the products they supply is controlled and guaranteed.
Ethical and other aspects of professional conduct	Yes	The Chamber of Pharmacists ensures the proper professional exercise and compliance with the ethical rules. Misconduct and breach of ethical rules may lead to disciplinary sanctions
QA / validation of HEI courses for pharmacists	Yes	The Chamber and its Regional Offices organise, finance and supervise the <u>practical</u> training of pharmacists.

References	
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References to texts and articles of national law	<p>Chamber of Pharmacist Act (<i>Apothekerkammergesetz</i>)</p> <p>Professional code of conduct (<i>Berufsordnung</i>)</p>
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Chapter 2. Pharmacy HEIs, students and courses

	Y/N, number or %	Comments.
HEIs in Austria	3	
Public	3	
Organisation of HEIs		
Attached to a science faculty	Yes	
Do HEIs offer B + M degrees?	No	
Austria		
Teaching staff		
Number of teaching staff (nationals)	58	Graz: 18, Wien: 26 Innsbruck: 14 without pre- and post-Docs
Number of international teaching staff (from EU MSs)		During the last years several professorial appointments have been effected, mostly of them from Germany. Honorary professorships were awarded to non-Austrian citizens. Visiting professors from several states have had time-limited teaching obligations.
Number of international teaching staff (non EU)		Visiting professors from several states have had time-limited teaching obligations. One honorary professor is Swiss citizen.
Entry requirements (beginning of S1 of B1, following secondary school)		
Specific pharmacy-related, national entrance examination	No	There are no national entrance examinations. However, there is a so called <i>study entrance and orientation phase</i> (first term), which students have to pass in order to continue their studies. Students have to pass three exams on the following lectures (16 ECTS): <ul style="list-style-type: none"> • Introductory lecture series on the main subjects of the pharmacy studies • Biology for pharmacists • In-organic and organic pharmaceutical chemistry
Is there a national <i>numerus clausus</i> ?	No	
Advanced entry		
At which level?		Pharmacy students after examination of equivalency of their studies. Doctoral students from pharmacy and pharmacy related disciplines after examination of equivalency of their degree.
What are the requirements?		Equivalency of the study.
Fees per year		
EU students	(€): 0	
For non EU students	(€): 380,-	
Length of course	4.5 years	

Specialization		
Do HEIs provide specialized courses?	Yes (but not hospital pharmacy)	There are is one diploma graduate program and a few doctorate graduate programs with specific profiles. The training course to qualify as qualified person is organised and held by the University of Vienna. Vienna is partner in the IMI-JU SafeSciMed education program
In which years?	Years: from 5 th year on	Courses are thus postgraduate.
Past and present changes in E&T		
Have there been any major changes since 1999?	Yes	
Are any major changes envisaged before 2019?	Yes	At the present stage it may be expected that Austrian pharmacists' education will not switch to the B, M education system. Nevertheless adjustment of the programmes will happen in any case.
Vienna		
Teaching staff		
Number of teaching staff (nationals)	26	
Number of international teaching staff (from EU MSs)		During the last years several professorial appointments have been effected, mostly of them from Germany. Honorary professorships were awarded to non-Austrian citizens. Visiting professors from several states have had time-limited teaching obligations.
Number of international teaching staff (non EU)		Visiting professors from several states have had time-limited teaching obligations. One honorary professor is Swiss citizen.
Specialization		
Does your HEI provide specialized courses?	Yes	
In which years?	Years: from year 5 on	There is one diploma graduate course and several doctorate programmes
Past and present changes in E&T		
Have there been any major changes since 1999 at your HEI?	Yes	There is regular adaptation of the study programme organised at national level, prepared mainly by the <i>Studienkommissionen</i> in co-operation with the Austrian Pharmaceutical Society and with involvement of the Chamber of Pharmacists.
Are any major changes envisaged before 2019 at your HEI?	Yes	There will be regular adaptation of the study programme organised at national level, - as far as can be seen -prepared mainly by the <i>Studienkommissionen</i> in co-operation with the Austrian Pharmaceutical Society and with involvement of the Chamber of Pharmacists. The adaptation of pharmacy curricula according to the Bologna criteria is an issue of discussion in Austria and it is not yet entirely clear which university will adapt the Bachelor-Master system for pharmacy education.

		The University of Vienna has already decided on adapting the Bologna criteria as published in the strategic University development plan. To our knowledge, the decisions in Graz and Innsbruck are pending.
Is your HEI typical of all HEIs in the country?	Yes	

Chapter 3. Teaching and learning methods

Student credits						
Method	Year 1	Year 2	Year 3	Year 4	Year 5	Postgraduate
HEIs courses						
Lecture	26	28	30	14	-	
Tutorial						
Practical	12	20	25	32	15	
Project work						
Traineeship						
Hospital						Post magisterial
Community						Post magisterial (obligatory for pharmacists) 12 months

The traineeship is obligatory for all pharmacists who want to work in either a community or a hospital pharmacy. It is not primarily necessary for pharmacists who aim at working in industry.

The formal qualification for a pharmacist is only gained after completion of the traineeship, as previously mentioned. That means that a pharmacist passed at least 5,5 years of education (4,5 years at university and 1 year traineeship in the pharmacy) in Austria. Without this formal qualification as pharmacist by the Austrian Chamber of Pharmacy working mobility is hindered.

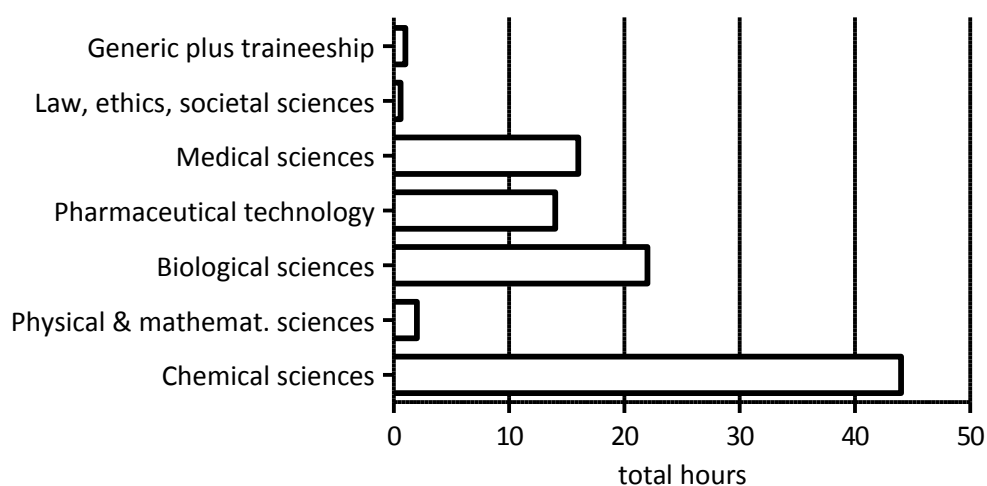
The traineeship in pharmacies after graduation from university is at the moment the only possibility to receive practical training, as no mandatory training periods in pharmacies during undergraduate pharmacy education are included.

Chapter 4. Subject areas

Student credits

Subject area	Year 1	Year 2	Year 3	Year 4	Total	% (/183)
CHEMSCI	20	22	19	20	81	44
PHYSMATH	3	-	-	-	3	2
BIOLSCI	5	17	13	16	41	22
PHARMTECH	2	-	15	8	25	14
MEDISCI	6	9	8	7	30	16
LAWSOC	-	-	-	1	1	0.6
GENERIC	2	-	-	-	2	1

Student credits (%) 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	The Austrian Universities consider the “ <i>magister der Pharmacy</i> ” as equivalent education to a Master Degree according to Bologna.
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	Lectures are ECTS weighted.
4. Obstacles to mobility	No	No obstacles. Traditional involvement in Erasmus programmes
5. European QA		The University of Vienna is organising the Austrian educational course for qualified persons.
6. European dimension	No	

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> ”	Implemented	
“ <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> ”	Yes	
“ <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> ”	At present 1 year	The post-university training programme should rather be more structured than be shortened.
“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> ”	Yes	
Directive annex	How does / will this directive annex affect pharmacy E&T?	If you wish to expand your answer, please add your comments below. Do you consider the directive annex valid? If not how would you change it?
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.	Yes	



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With the support of the Lifelong Learning Programme of the European Union
(142078-LLP-1-2008-BE-ERASMUS-ECDSP).

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