

Pharmacy education & training in

ITALY

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_Paradigm.pdf)

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**Approval of the first version, 2010 by the
Conference of Deans of Italian Faculties of Pharmacy**



Conference of Deans of Italian Faculties of Pharmacy

The President

To: Prof. Carlo Rossi
Università di Perugia (I)

Dear Carlo

This is to confirm that the Italian Conference of Deans on March 18, 2010 approved the document you proposed for the PHARMINE project.

Giuseppe Ronsisvalle
President

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Summary

Pharmacy education and training in Italy provides:

1. A deep interdisciplinary knowledge that is fundamental for the comprehension of drug structure and activity with reference to its interaction with bio-molecules at both cellular and systemic level.
2. A deep chemical and biological knowledge, integrated with elements of drug economy and drug utilization, along with the knowledge of national and community laws that regulate the different activities in the field.
3. A deep knowledge useful for the professional fulfilment of the pharmaceutical service in the general framework of the National Health Service.

Introduction

Statistics

Total population: 61,201,377 (February 2012)

Gross national income per capita (PPP international \$): 28,970

Life expectancy at birth m/f (years): 78/84

Healthy life expectancy at birth m/f (years, 2003): 71/75

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): 83/44

Total expenditure on health per capita (Intl \$, 2006): 2,623

Total expenditure on health as % of GDP (2006): 9.0

See also: [World Health Statistics 2008](#)

From the WHO "Highlights on health in Italy"

In 2002, Italians had the seventh highest life expectancy in Europe, equivalent to that in France. Women in Italy continue to have a higher life expectancy than men: 82.5 versus 76.8 years. Italians have one of the highest estimates of healthy life expectancy in Europe.

Between 1980 and 2001, Italy reduced both infant and neonatal mortality rates by about two thirds, more rapidly than the average for the Europe. In 2001, Italy's infant mortality rate was slightly lower than the European average, whereas neonatal mortality was slightly higher.

Non-communicable conditions account for 81% of all deaths in Italy; this includes cancer, which causes 31% of deaths; and external causes (intentional and unintentional injuries) cause about 6%. Thirty-eight per cent of total deaths in Italy in 2001 were due to cardiovascular diseases, with ischemic heart disease being the single biggest killer, causing 12% of all deaths. The mortality rate due to diseases of pulmonary circulation and other heart disease among people 15–29 years of age was the highest in Europe in 2001.

Almost half the men and one-third of women in Italy are overweight. About 10% of both men and women are obese. About 17% of 15-year-old boys in Italy are pre-obese; about 3% are obese. About 7% of 15-year-old girls are pre-obese and 1% are obese.

In 2000, people in Italy consumed almost 8% more cigarettes per person than the European average. Between 1995 and 2000, per capita consumption increased by almost 13% in the country, whereas the European trend was downward. Between 1994 and 2001, surveys found that smoking prevalence among men and women had decreased. Cancer of the trachea, bronchus and lung accounted for almost 7% of all deaths in Italy in 2001.

Neuropsychiatric conditions have the highest burden of disease in the Italian population due to the associated disability in daily living. The burden is greater among females than males.

In 2001, Italians consumed about 16% less alcohol per capita than the European average. Since the late 1980s, consumption in Italy has dropped by 27%. Italy has a decreasing trend in deaths from chronic liver disease, following the pattern in Europe, but in 2001, the mortality rate for the population was 7% above the European average.

In 2000 almost 79% of injecting drug users were infected with hepatitis C. Known to be particularly vulnerable are prison populations. In 2003, Italy had a 134.5% occupancy level in its prisons based on official capacity.

National Health Care System.

The Italian National Health Care System (SSN) was founded in 1978 (L.833/78, see *Dalla L. 833/78 istituzione del servizio sanitario nazionale 1978.pdf*) to guarantee access equity and uniform provision of comprehensive care throughout the country. Responsibility for healthcare is shared between central government and the regions, as a decentralized system. The national government now sets the “essential levels of care”: hospitalization and primary care are free, including life-saving drugs. For tests and diagnostic procedures, other drugs, a copayment (ticket) has been established (about 30%). However about 40% of the population (e.g. children, pregnant women, elderly people) are exempt from these tickets.

Italian SSN, second in the world, according WHO, ensures equal access to primary care, although regional disparities persist concerning specialist care.

SSN funding is based on a regressive payroll tax. The rest of the founding comes from national and regional general taxation. The regions are financed from SSN according to a formula based on weighted capitation and past spending. Then the regions allocate these funds to Local Health Units, delivering care to citizens.

In Italy private health insurances are not common and is not possible to opt out of SSN. Physicians are paid via capitation , whereas hospitals by DRG (diagnosis-related group).

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

	Y/N, number	Comments.
Community pharmacy		
Number of community pharmacists	40,346	1,517 inhabitants / pharmacist
Number of community pharmacies	17,617	Data from <i>Federfarma</i> (Italian Pharmacist Federation) Pharmacists per pharmacy: from 1 to 20. For towns with less than 12,500 inhabitants there is one pharmacy for every 5,000 inhabitants. For communes with more than 12,500 inhabitants, there is one pharmacy for every 4,000 inhabitants. Additional pharmacies are exceptionally opened in very isolated locations. In such a fashion the National Health Care System provides medicines in every part of the territory. The mean number of inhabitants per pharmacy is around 3,474. 2012: a law approved recently provides the possibility to open 5000 more private pharmacies; it will take at least one year before the required examinations will be finished.
Competences and roles of community pharmacists		Pharmacists are allowed to suggest or advise medicines only in case of OTC and generic substitution of specialities. In addition, pharmacists book medical examination, perform blood pressure and sugar testing without writing any diagnosis, make galenic preparations, provide in some cases home drug dispensing (D.l. 3/10/2009 n° 153; see http://www.gazzettaufficiale.it/).
Is ownership of a community pharmacy limited to pharmacists?	Yes	
Rules governing the distribution of pharmacies?	Yes	Limited to a minimum number of customers (4500) with >200 m minimum distance between pharmacies (ECORYS/E.C. Single Market)
Are drugs and healthcare products available to the general public by channels other than pharmacies?	Yes	Internet pharmacists are not allowed. OTC drugs are also marketed in some supermarkets in Italy (Coop) Exceptions foreseen by the article 83 of the Italian law n. 193 of April 6, 2006 allow veterinarians to use drugs only for "out patient" treatment or to hand drugs to owners of animals to start the pharmacological treatment
Are persons other than pharmacists involved in community practice?	No	Only pharmacists are allowed to dispense prescription and OTC drugs to the general public. Pharmacists are assisted by employees/assistants.
Their titles and number(s)		Assistants are not HEI graduates, they have only a secondary school education and their number varies according to the size of the pharmacy.
Competences and roles		They organize drugs in the storage shelves and control drug expiration dates. They take care of maintenance of equipment and glassware.
Hospital pharmacy		
Number of pharmacists	2,745	Data provided by the SIFO (Italian Society of Hospital Pharmacy) (2006)
Number of pharmacies	297	Data provided by the SIFO (Italian Society of Hospital Pharmacy) (2006)
Competences and roles of hospital		Dispensing medicines, medical devices, galenic preparations, parenteral nutrition solutions and cytotoxic preparations. Aseptic manufacturing.

pharmacists		<p>Pharmaceutical care, pharmacovigilance.</p> <p>Diagnostic services: blood sugar, blood pressure.</p> <p>Directing the pharmacy, the director of the pharmacy distributes and takes care of the appropriate quantity of medicines needed by the wards. Only on very rare occasions and in an experimental way can they prescribe medicines together with MDs.</p>
Pharmaceutical and related industries		
Number of companies	324	<p>Including companies producing medicinal products and pharmaceutical raw materials. Data from <i>Farmindustria</i> (Pharma industry)</p> <p>Data from EFPIA (2006 or estimate)</p> <p>Pharmaceutical industry research & development M€ 1180</p> <p>Pharmaceutical production M€ 22455</p> <p>Employment in the pharmaceutical industry 72000</p> <p>Pharmaceutical market value (at ex-factory prices) M€ 16734</p> <p>Share (estimate - in %) accounted for by generics in pharmaceutical market sales value (at ex-factory prices) (2007) 20.3</p> <p>Pharmaceutical exports M€ 11340</p> <p>Pharmaceutical imports M€ 13054</p> <p>Pharmaceutical trade balance M€ -1714</p> <p>Total spending (public and private) on healthcare as a percentage of GDP at market prices 9.0</p> <p>Payment for pharmaceuticals by compulsory health insurance systems and national health services (ambulatory care only) M€ 11493</p>
Industrial pharmacy		
Pharmacists working in industry	4,300	.
Competences and roles		Regulatory affairs, production, analytical divisions, marketing, research and development.
Other sectors		
Pharmacists working in other sectors		There are pharmacists in the parliament. Pharmacists are present in the armed forces. Pharmacists are employed in the Military Pharmaceutical Institute (Istituto Chimico Farmaceutico Militare, www.farmaceuticomilitare.it), that produces medicines for the armed forces.
Roles of professional associations		
Registration of pharmacists	Yes	<p>Registration with and membership of <i>FOFI (Federazione Ordini Farmacisti Italiani)</i>.</p> <p>The state qualification test is compulsory to become registered pharmacist and to gain the condition necessary to FOFI membership. The state qualification test has one written exam, three practical exams and one final oral exam.</p> <p>FOFI stimulates continuous professional development and acts as an intermediary with the Italian government.</p> <p>There is a compulsory training period for pharmacists from other EU member states. Pharmacists coming from EU countries must pass the state qualification test before practicing the profession and apply for professional recognition to the Ministry of Health.</p>
Creation of community pharmacies and control of territorial distribution	No	<p>Creation of community pharmacies is provided by national law according to demographic, topographic and urban rules.</p> <p>Pharmacy ownership is limited to pharmacists, cooperatives of pharmacists and local government (1,200 pharmacies are owned by local government</p>

		and managed by pharmacists).
Ethical aspects of professional conduct	Yes	Revocation in case of malpractice or non-compliance with ethical code.
Quality assurance and validation of HEI courses for pharmacists	No	FOFI may propose the addition or removal of classes but has no decisional power.

References and websites	
References to texts and articles of Italian law	Italian Pharmacopeia (F.U. XII), D. L.vo April 24, 2006, n. 219 http://www.foram.org/media/1649/dl219_240406.pdf
Italian references	
<i>FOFI (Federazione Ordini Farmacisti Italiani)</i>	http://www.fofi.it/cont/home/
<i>Federazione nazionale dei titolari di farmacia italiani (Federpharma)</i>	https://www.federfarma.it/
<i>Farindustria (Italian pharmaceutical industry)</i>	http://www.farindustria.it/Farindustria/html/index.asp
<i>SIFO (Societa Italiano de Farmacia Ospedaliari):</i>	http://www.sifoweb.it/index.asp
EU references	
PHARMWEB:	http://www.pharmweb.net/
The EURYDICE database on education systems in Europe (Finland)	http://eacea.ec.europa.eu/education/eurydice/documents/eurybase/national_summary_sheets/047_FI_EN.pdf
ECORYS: "Study of regulatory restrictions in the field of pharmacies". ECORYS Nederland BV, 22 June 2007.	http://ec.europa.eu/internal_market/services/pharmacy_en.htm
EFPIA (The European Federation of Pharmaceutical Industries and Associations): "The Pharmaceutical Industry in Figures"	www.efpia.eu/Content/Default.asp?PageID=317
Pharmaceutical Group of the EU (PGEU)	http://www.pgeu.org/
European Association of Hospital Pharmacists (EAHP)	http://www.eahp.eu/
European Industrial Pharmacists' Group (EIPG)	http://www.eipg.eu/
European Hospital and Healthcare Federation (HOPE)	http://www.hope.be/
WHO	
WHO health statistics	www.who.int/whosis/en/index.html

Chapter 2. Pharmacy HEIs, students and courses

	Y/N or number	Comments.
Total number of pharmacy HEIs in Italy	32	<ol style="list-style-type: none"> 1. Faculty of Pharmacy, University of Bari 2. Faculty of Pharmacy, University of Bologna 3. Faculty of Pharmacy, University of Cagliari 4. Faculty of Pharmacy, University of Camerino 5. Faculty of Pharmacy, University of Catania 6. Faculty of Pharmacy, University of Chieti 7. Faculty of Pharmacy, University of Ferrara 8. Faculty of Pharmacy, University of Florence 9. Faculty of Pharmacy, University of Genova 10. Faculty of Pharmacy, University of Messina 11. Faculty of Pharmacy, University of Milan 12. Faculty of Pharmacy, University of Modena 13. Faculty of Pharmacy, University of Naples Federico II 14. Faculty of Pharmacy, University of Padova 15. Faculty of Pharmacy, University of Palermo 16. Faculty of Pharmacy, University of Parma 17. Faculty of Pharmacy, University of Pavia 18. Faculty of Pharmacy, University of Perugia 19. Faculty of Pharmacy, University of Pisa 20. Faculty of Pharmacy, University of Rome La Sapienza 21. Faculty of Pharmacy, University of Salerno 22. Faculty of Pharmacy, University of Sassari 23. Faculty of Pharmacy, University of Siena 24. Faculty of Pharmacy, University of Trieste 25. Faculty of Pharmacy, University of Turin 26. Faculty of Pharmacy, University of Urbino 27. Faculty of Pharmacy, University of Calabria 28. Faculty of Pharmacy, University of Piemonte Orientale 29. Faculty of Pharmacy, University of Catanzaro 30. Faculty of Pharmacy, University of Basilicata 31. Course in Pharmacy, Second University of Naples 32. Course in Pharmacy, University of Rome Tor Vergata
Public	32	
Organisation of HEIs		
Independent faculty	30 / 32	
Attached to a science faculty	Yes	The course in Pharmacy of the University of Rome Tor Vergata is attached to the Faculty of Sciences, while the course in Pharmacy of the Second University of Naples is attached to both the Faculty of Science and the Faculty of Medicine
Attached to a medical faculty	Yes	
HEIs offer seamless B + M degrees	Yes	<p><u>Uni. Perugia, Pharmacy:</u> http://facolta.unipg.it/farmacia/ 5-year seamless degree courses</p> <ol style="list-style-type: none"> 1. Pharmaceutical biotechnology 2. Pharmacy <ol style="list-style-type: none"> a. Pharmaceutical chemistry and technology (CTF) b. Pharmacy

Italy		
Teaching staff		
Number of teaching staff (nationals)	1,354	This number corresponds to the equivalent teaching staff. In Italy, a full professor has a value of 1, an associate professor a value of 0.7 and an assistant professor a value of 0.5. The total number of people is actually >1354.
International teaching staff	?	Exceptional.
Professionals other than HEIs	?	In Perugia (see later) outsiders make up 14% of overall staff numbers.
Students		
Places at entry following secondary school	No	Any student coming from any kind of high school is allowed to enter to university There is no national <i>numerus clauses</i> in Italy. When the student population increases too much, Faculties may decide for a programmed number
Number of applicants for entry	32,889	Data from the Ministry of Universities and Research for 2008 http://www.miur.it/0002Univer/index_cf2.htm
Graduates that become registered pharmacists.	1,507	Data from national FOFI (Italian Federation of Pharmacist Orders), 2008
International students (from EU member states)	?	Perugia : 28 out of a total student population of 1707 (1.6%) (No national data)
International students (non EU)	?	Perugia : 81 out of a total student population of 1707 (4.7%) (No national data)
Entry requirements following secondary school)		
Specific pharmacy-related entrance examination	Yes	Some Faculties of Pharmacy have a specific written entrance examination.
Advanced entry		
At which level?	Yes for pharma. technology	Yes, students may come to do a second level (master).
What are the requirements?		In Perugia the Faculty of Sciences runs the Pharmaceutical biotechnology bachelor course. In other universities, the bachelor + master course in Pharmaceutical biotechnology is given by a dedicated independent faculty.
Specific requirements for international students (EU or non EU).		Normally, they are accepted only after examination of their curriculum and providing they know Italian. If not, they have to attend Italian intensive courses at the CLA (University Linguistic Center, http://www-b.unipg.it/clateneo/home.php?res=h)
Fees per year		
For all students	1,891 € (average)	The fee varies according to the family income
Length of course	5	There is an obligatory 6-month traineeship with a university examination and a certain failure rate.
Specialization		
Specialized courses	Yes	Hospital pharmacy in Perugia
Year (s)	> 5 th year	Postgraduate specialisation.

Student numbers	5-10	In Perugia, the student number in hospital pharmacy specialization is 5 that corresponds to around 10% of the graduated students. In Italy, the number of students in hospital pharmacy can vary from 5 to 10.
Past and present changes in E&T in Italy		
Major changes since 1999	Yes	1) The ECTS system has been applied 2) The curricula have been harmonized 3) The third level of instruction has been improved 4) Student/teacher ratio is controlled
Major changes envisaged before 2019	Yes	The English knowledge should be improved among students and teachers. Some classes will be given in English.
Perugia		
Teaching staff		
Teaching staff (nationals)	65 (persons)	Data as of December 31, 2009
Number of international teaching staff (from EU MSs)	1	
Professionals other than HEI	11	14% of total staff
Students		
Places at entry following secondary school		Any student coming from any kind of high school is allowed to enter to university
Number of applicants for entry	150 average	
Graduates that become registered pharmacists.	55 average	Data from regional FOFI-2008 The drop-out is very high, around 63%.
International students (from EU member states)		Data from regional FOFI-2008, students from EU over 5 years: 28.
International students (non EU)		Data from regional FOFI-2008, international students from non EU over 5 years : 81.
Entry requirements (beginning of S1 of B1, following secondary school)		
Specific pharmacy-related entrance examination	Yes	Written examination
Fees per year		
For all students	1700 € (maximum)	2009 data from the administration of Perugia university. The fee varies according to the family income and can be as low as 440
Is your HEI typical of all HEIs in the country?	Yes	There is a basic common curriculum fixed by the Italian government. The basic curriculum takes into account the European directives 85/432/EEC and 85/433/CEE

References	
References to texts and articles of national law	Italian Pharmacopeia (F.U. XII); D. L.vo April 24, 2006, n. 219
Bibliographic references (EU, national, international)	European Pharmacopeia (VI): http://online.edqm.eu/entry.htm
Websites	University of Perugia: http://www.unipg.it/ In English : http://www.unipg.it/comunica/guide/frame1.html Pharmacy :! http://www.unipg.it/comunica/guide/frame1.html Pharmacy degree courses : http://www.unipg.it/comunica/guide/frame1.html

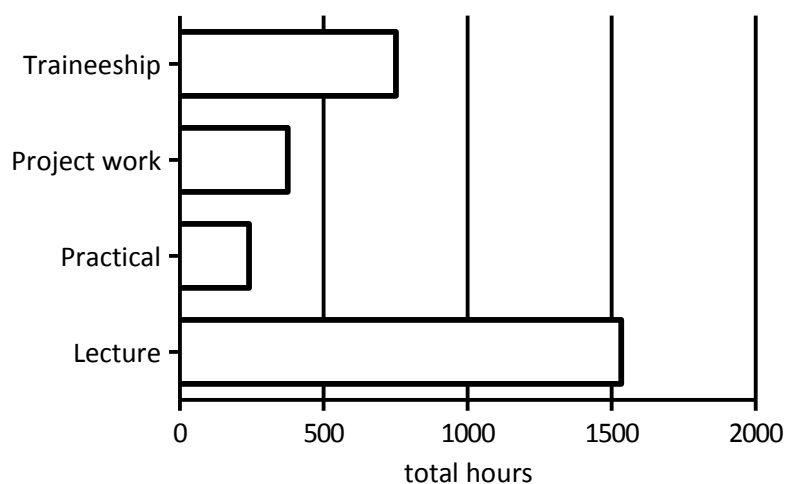
Chapter 3. Teaching and learning methods

Student hours

Method	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Lecture	364	336	350	336	147	1533
Practical	45	90		105		240
Project work					375	375
<i>Running total</i>	<i>409</i>	<i>426</i>	<i>350</i>	<i>441</i>	<i>522</i>	<i>2148</i>
Traineeship						
Hospital				300	600	900
OR Community				300	600	
OR Industrial				300	600	
<i>Running total</i>	<i>409</i>	<i>426</i>	<i>350</i>	<i>691</i>	<i>1022</i>	<i>3048</i>
Choice courses			70		35	105
Optional courses	21				14	35
Grand total	430	426	420	691	1071	3188

Websites	
Faculty of Pharmacy, University of Perugia	Pharmacy : http://www.unipg.it/comunica/guide/frame1.html Pharmacy degree courses : http://www.unipg.it/comunica/guide/frame1.html

Hours by methods

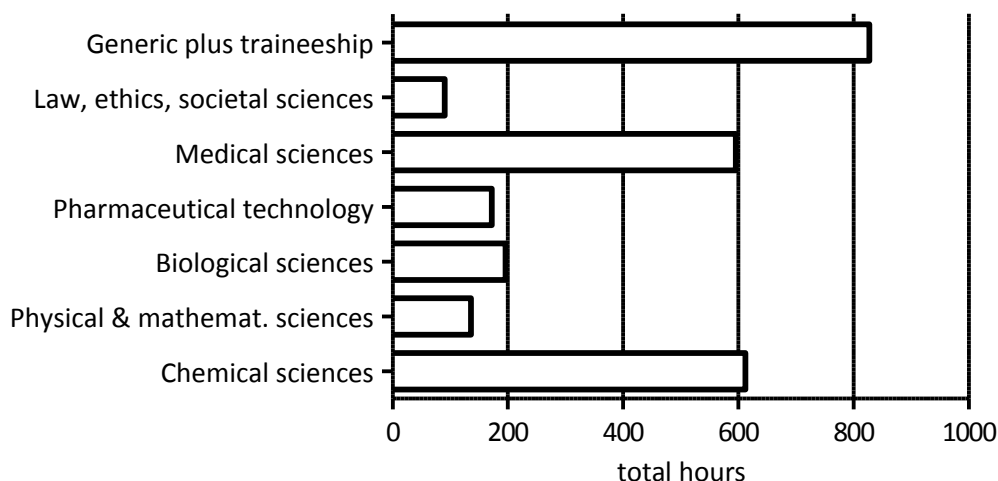


Chapter 4. Subject areas

Student hours

Subject area	Year 1	Year 2	Year 3	Year 4	Year 5	Total
CHEMSCI	91	230	70	186	35	612
PHYSMATH	136					136
BIOLSCI	70	91		35		196
PHARMTECH				95	77	172
MEDISCI	70	105	280	105	35	595
LAWSOC			70	20		90
GENERIC plus TRAINEESHIP	42			250	535	827
Grand total	409	426	420	691	682*	2628*

Hours by subject area



*: not including project work

Websites

Faculty of Pharmacy, university of Perugia	Pharmacy :! http://www.unipg.it/comunica/guide/frame1.html Pharmacy degree courses : http://www.unipg.it/comunica/guide/frame1.html
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Chapter 5. Impact of the Bologna principles

Bologna principle	Is the principle applied? Y/N or partially	Comments.
1. Comparable degrees / Diploma Supplement	Yes	Multilateral recognition of all EU degrees if the length of the course is 5 years. Italian faculties issue a diploma supplement In English.
2. Two main cycles (B and M) with entry and exit at B level	No	Pharmacy studies are of 5 years' duration (seamless cycle).
3. ECTS system of credits / links to LLL	Yes	<p>ECTS credits can be awarded for various types of activity from taking an exam or completing a presentation or piece for coursework to carrying out research or a laboratory experiment. Therefore, given that both theoretical and practical work is recognised, a connection is made between the more theoretical pre-graduate education and the more practical or research oriented post-graduate education/training. In addition, the ECTS credits gained during pre-graduate education are recognised and may be used for access to postgraduate education or training, therefore creating an dispensable bond between the two levels of education.</p> <p>The framework adopted from the Bologna process was that of a three cycle higher education system and a concurring Credit Accumulation system. The reform provided for: the 1st cycle (typically 180–240 ECTS credits, usually awarding a Bachelor's degree), the 2nd cycle (typically 90–120 ECTS credits, usually awarding a Master's degree) and the 3rd cycle (Doctoral degree - No ECTS limits given). The Credit Accumulation System, being learner-centred, allows credits to be accumulated in the three cycles with a view to individuals obtaining qualifications, Credits awarded in one programme may be transferred into another programme, offered by the same or another institution.</p>
4. Obstacles to mobility	No	A language program for students is provided by the CLA (University Linguistic Center, http://www-b.unipg.it/clateneo/home.php?res=h) and it is free. Lodging is helped by scholarships given by the University and ADISU (Agency for the University Education Rights, http://www.adisupg.it/ This is the Umbria website but this Agency exists in other regions) Normally, in this way students may afford the majority of the mobility expenses.
5. European QA	No	Perugia University organizes QA through a Quality Committee, whose responsible is Prof. Paolo Fantozzi (paolofan@unipg.it ; tel. +390755857910; fax +390755857943), which takes care of management system application and assures quality policy.
6. European dimension		The only initiatives in collaboration with other European partners are those coming from staff mobility and self promoted research collaborations.
ERASMUS staff exchange to your HEI from elsewhere		Number of staff months: 0.75
ERASMUS staff exchange from your HEI to other HEIs		Number of staff months: 0.75
ERASMUS student exchange to your HEI from elsewhere		Number of student months: 329*
ERASMUS student exchange from your HEI to other HEIs		Number of student months: 107

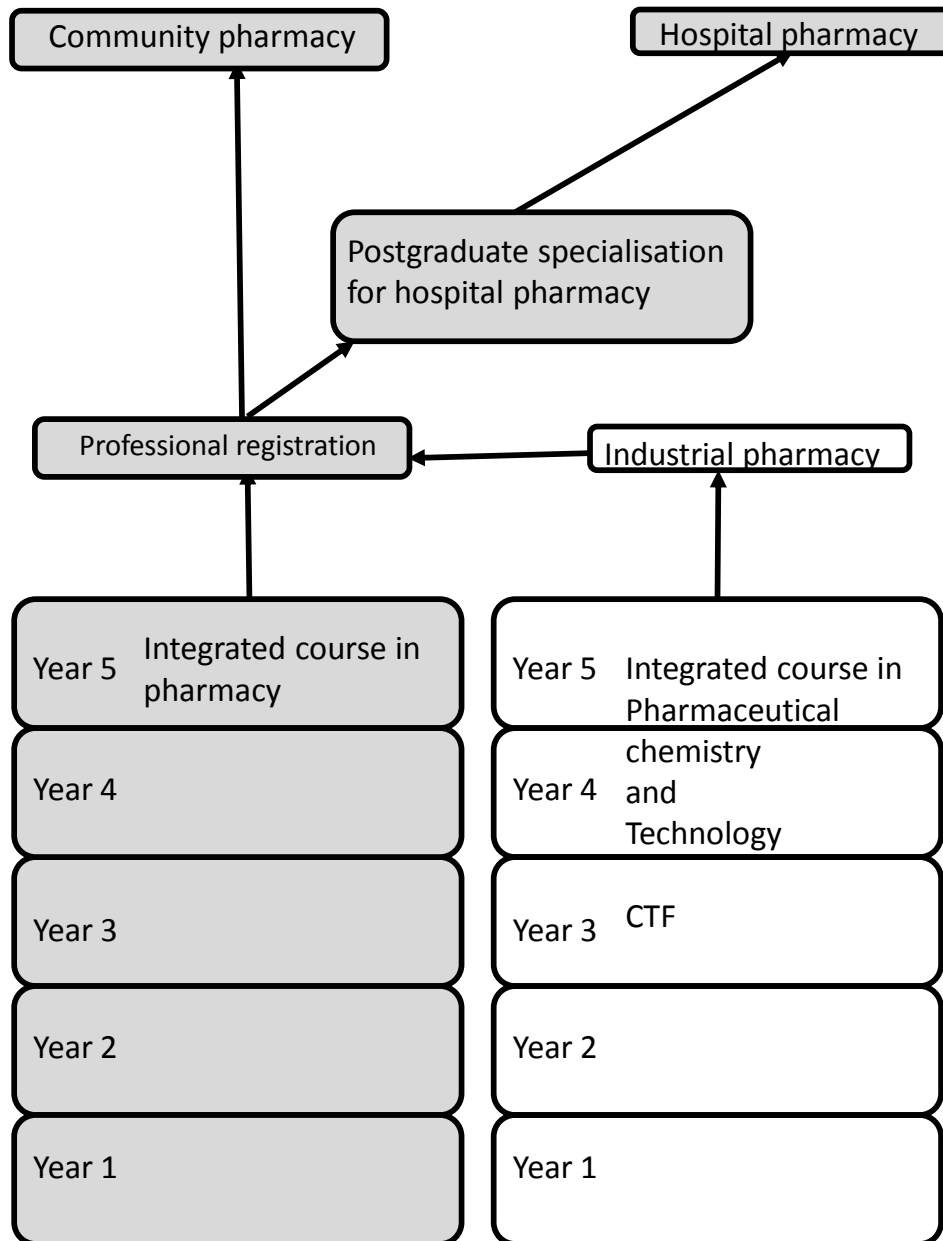
Data from the Department for International Relations , European community programmes and International cooperation office - University of Perugia-2008-2009

*: 50% of these students are coming from Spain and often spend one year (12 months) in the Faculty. The University of Perugia registered a 20% increase of the incoming students this year. This is a peculiarity of the University of Perugia since the national average increase is 2% (2009/10).

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

The directive states	How does / will this directive statement affect pharmacy E&T?
“Evidence of formal qualifications as a pharmacist shall attest to training of at least <u>five years' duration</u> ,...”	Pharmacy education and training in the faculty of Pharmacy in Italy lasts 5 years and includes the practical traineeship.
“ <u>...four years of full-time theoretical and practical training</u> at a university or at a higher institute of a level recognised as equivalent, or under the supervision of a university;”	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> ”	Traineeship is supervised and examined by the HEI not by the Italian Order of Pharmacists (FOFI)? Traineeship is evaluated by Pharmacists who supervise students. The evaluation is accepted and validated by the HEI.
“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?
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.	These topics are already part of the curriculum. Carlo Rossi believes that the analysis of medicinal products part should be reduced in Italy. At the moment three/four (depending from the Faculty) exams on this topic are included in the curriculum. Carlo Rossi strongly believes that elements of Pathology should be included in the list.

The Italian scheme for PET based on Perugia (2012)



If students follow the community/hospital pharmacy traineeship in the CTF course on the right they can register with FOPI and become practicing pharmacists.

PCN

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Nancy*



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PHARMINE

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