

CHARLES UNIVERSITY IN PRAGUE, FACULTY OF MEDICINE IN PILSEN

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MEDICAL STUDIES IN PILSEN 2009/2010

Introduction and History

The Faculty of Medicine in Pilsen was founded by President Benes' decree in October 1945 as a branch of the Prague Medical Faculty and, in 1953, it became an independent faculty of Charles University. During its existence the Faculty has educated almost 7000 doctors who are now practising their profession both in the Czech Republic and abroad. Its study program uses similar curriculum as most European medical faculties. Students receive training for the medical profession as well as for research in medical sciences.

Studying at the Faculty of Medicine requires high intellectual abilities and good moral qualities. It is not the aim of the Faculty to produce a high number of graduates. Our aim is to provide an education which will prepare future doctors both professionally and morally to devote their energy and effort to helping the sick and achieving advances in the medical sciences.

Location and Entertainment

The city of Pilsen has over 170,000 inhabitants and is situated about 90 km southwest of Prague and 70 km east of the German border. It is surrounded by beautiful countryside and is famous for its Pilsner Urquell brewery, the Skoda factory and the University of West Bohemia. The historic centre of the town offers many places of cultural interest (theatres, concert halls, a modern state scientific library, museum, historical underground, and cinema) as well as numerous sports facilities (swimming pools, gyms, and bowling clubs). Pilsen also frequently hosts scientific congresses and gatherings.

Courses

The Faculty of Medicine in Pilsen offers courses in General Medicine (six years) and Dentistry (five years) in both Czech and in English languages.

For medical students, the first two years of study are devoted to theoretical disciplines, such as Anatomy, Histology, Embryology, Biophysics, Biochemistry and Physiology. During the third and fourth years, pre-clinical subjects, such as Pathological Anatomy, Pathological Physiology, Microbiology, Immunology and Pharmacology are studied. Bed-side teaching is also introduced in the third year. The last two years of study are fully devoted to clinical subjects. For students of Dentistry, the first two years of study are devoted to theoretical disciplines and pre-clinical Dentistry, the third, fourth and fifth years are devoted to clinical stomatology.

The academic years for theoretical disciplines and pre-clinical subjects are organized into winter and summer semesters. Each semester consists of a teaching period followed by an examination period. The clinical courses are organized in a block system.

Fees

The annual fee for the academic year 2009/2010 is € 8.500, - for General Medicine and € 9.000, - for Dentistry. The Faculty guarantees that the fee will remain unchanged throughout the period of the student's studies. It covers all instruction (lectures, seminars, lab work, clinical training and tutorials); certain necessary texts such as laboratory manuals etc., and entitle students to use all faculty facilities including the library and a modern computer lab.

The annual tuition fee also includes the vaccination against hepatitis B arranged by the faculty in the second year of study.

The fee does not cover accommodation and meals. Other expenses not covered by the annual fee include a residence permit, and payments necessary for the translation and official recognition of secondary school certificates.

Completion of Study

After completing their studies, students are awarded a Doctor of Medicine degree - MUDr. (Medicinae Universae Doctor) or MDDr. for the students of Dentistry, at a traditional ceremony held in the Carolinum, a historical University hall in Prague. This degree is widely recognized in most countries.

Practical Points

Accommodation: The Faculty provides accommodation for students in two halls of residence, both of which are located close to the medical faculty. There are 2 double-bed rooms with a shared kitchen, bathroom and toilet. Within the halls of residence are also a cafeteria and a sport facility. Accommodation is not included in the tuition fee. Rent for a single bed in a double-bed room averages approximately € 135, - per month.

Library: Students are not required to purchase their own textbooks as they are entitled to use the faculty library where all the necessary books can be borrowed for a period of one year. For longer periods of time they are, however, expected to purchase their own textbooks. Students also have access to a modern computer lab equipped with several computers.

Meals: Meals can be obtained at moderate prices in any of the canteens in the faculty buildings or in the faculty hospital. Price of a meal is approximately € 2, -.

Faculty of Medicine in Pilsen and its advantages

Location in the Czech Republic: The Czech Republic is located in the heart of Europe and thus attracts business, students and tourists from many countries. Easy access to a number of countries is one of the many advantages of studying in Central Europe. The Czech Republic is a beautiful country with rolling hills and countryside, contrasting with historic cities which contain some of the most interesting examples of architecture in the world. Modern shops and department stores offer a rich assortment of goods both of Czech and foreign origin.

Connections to Prague: There are frequent direct flights from most major airports to the modern International Airport of Prague. There are also excellent coach and train links with other countries in Europe.

Location close to Prague:

Bus and train connections between Prague and Pilsen are frequent with the journey lasting approximately 1.5 hours. The journey by car is approximately 1 hour.

Other advantages

- **Low fee compared to those required in the English speaking countries**
- **Low cost of living**
- **Efficient and inexpensive public transport**
- **Experienced and devoted faculty staff**
- **Well-equipped laboratories and library**
- **Modern faculty hospital**
- **Short distances between faculty buildings, Faculty hospital and accommodation**

Living expenses in EURO

expenses	price for a month	price for a year
Tuition fee	-	8.500,-/9.000,-
Accommodation	135,-	1.620,-
Food	100,-	1200,-
Transport, warm clothes and other expenses	-	1881,-
Total	-	13.201, - €/13.701 ,- €

Admission requirements

Applicants must present secondary school certificates. Passes equivalent to the British GCE A Level are normally required in three subjects (Chemistry, Physics and Biology). Applicants must satisfactorily pass the entrance exam in Physics, Chemistry, and Biology. Applicants are expected to have secondary school knowledge but the University allows for reasonable differences in levels of knowledge in students from different schools and countries.

Entrance Examination

The entrance examination for the study programme in English is organized as follows:

1. In June for students who are able to take part at the Faculty of Medicine in Pilsen.
2. During summer vacation in the applicant's country (if the examination is organized by the appropriate agency).

The entrance examination fee is 500,- CZK in Czech Republic. The examination consists of a multiple choice test in Chemistry, Biology and Physics. The requirements are similar to the British "A" level examination requirements.

The tests are administered and marked by a university professor. The admission of students remains however within the responsibility of the Dean of the Faculty.

Depending on the outcome of the examination, those who achieve the required results enrol at the Faculty of Medicine in Pilsen in late September of the same year. All admitted students are invited to join a Czech language course during the month of September or a Summer Language School during the summer vacation.

Students who fail the entrance examination may not retake the exam during that same academic year.

Whether you succeed in the entrance examination and in your studies is fully your responsibility. Each applicant shall submit a certified copy of their original CE certificate on or before the date of enrollment.

How to apply

The applicant should send a completed application and copies of his/her secondary school certificates to:

Charles University in Prague
Faculty of Medicine in Pilsen
Centre for Studies in English
Lidická 1, 301 66 Plzeň
Czech Republic

Tel.: + 420-377 593 175
FAX: + 420-377 259 278
E mail: medstudy@lfp.cuni.cz

Please do not send original certificates. Secondary school certificates should be translated into English or Czech and legally certified by the Ministry of Foreign Affairs in the applicant's home country, as well as the nearest Czech Embassy (Consulate). Those documents should be presented at the admission exam to which the applicant will be invited.

The applicant may also contact the following agencies that cooperate with the Faculty:

- Academic Agency - Vratlavova 10, Praha 2, Czech Republic, Tel.: +420-2-24915571

- Skandinavien Agency – contact person Mr. Rahmany Nejad Ali, Tel.: +420-776251584
- CMS Agency – contact person MUDr. Vasileios Tzigkounakis, Tel.: +420-602120189
- Horania Agency - Pod Královkou 1/1942, Praha 6-Břevnov, Czech Republic, Tel.: +420-602-312958
- Caxton Publications Private Ltd.-Carmel Centre, Banerji Road, Cochin-682 018, S. India, Tel.: +91-484-390409
- Afamia , PhDr. Issam Ramadan, Czech Republic, Tel.: +420-608-076099

When Admitted

For all the applicants:

The successful applicant must pay the annual fee before the date of enrolment.

Visa information (For non EU applicants):

On the date of admission examinations, every admitted candidate is provided with the letter of acceptance and instructions on how to apply for a Temporary Residence Permit – Study Visa. After admission, the candidate must apply for his/her Visa at the Consulate of the Czech Republic in or near of his/her country of citizenship. This Visa is necessary for enrolment and will be extended for every academic year. Every student admitted to the Faculty must have a Temporary Residence Permit. It may take several weeks to obtain this Permit (Visa) so the admitted candidates are advised to apply for it without any delay.

For more information consult the nearest Czech Embassy or Consulate.

Syllabus of entrance exams

BIOLOGY

1. Systematic subtyping

Protozoa, their subtyping and impact, Sporozoa, Ciliata, Porifera, Cnidaria and Acnidaria, Plathelminthes, Nemathelminthes, Mollusca, Annelida, Arthropoda - their characteristic and subtyping, Deuterostomia, Chordata, Vertebrata, Fish, Amphibians, Reptiles, Mammalia, Primates, Viruses, Bacteria

2. The general biology

The cell and its structure. The cell cycle. The cell division. The cell metabolism. The cell organelles, their structure and function. Chromosomes and their structure, number of chromosomes. Intra and extranuclear DNA, their structure and function. RNA and its types, structure and function. The protein synthesis. The genetic code. Mendel's hybridisation experiments and the rules of inheritance.

Heritability of sex. Human hereditary diseases. Spontaneous and induced mutations and mutagenic factors. The origin of the life on Earth and its evolution. The origin and evolution of the man, the main periods and human races. Sexual and asexual reproduction. Ontogenesis. Heterotrophy, autotrophy and mixotrophy. Photosynthesis. Ecology and basic ecological terms. The circulation of substances in the nature and the food-chain. Biotic and abiotic compounds of the environment. Characteristic of the ecosystem and possible ways of its evolution.

3. The biology of the man

The bones, their structure and conjunction. The skeleton of the man. Voluntary and smooth muscles. The internal environment and the subtyping of body fluids. The blood, its composition, amount and function. The red blood cells, their shape, composition, function and lifetime. Leukocytes, their subtyping, quantity and function. Non-specific and specific immunity, immunisation and vaccination. The blood groups and transfusion. The Rhesus-factor. The coagulation of blood. The human heart, its structure and function. The circulation of blood. The capillaries and the production of the tissue fluid. The control of blood circulation. The lymph and its circulation. The respiratory system of the man. The exchange of gasses in the lungs and tissues. The breathing control. The digestive system of the man and the function of its particular parts. The digestion and digestive enzymes. Conversion of particular nutrients and the role of saccharids, lipids and proteins. The liver and its function.. The optimal composition of the food according to quality and quantity. Vitamins soluble in lipids and their impact. The B group vitamins, their function and avitaminosis manifestation. Vitamin C and its function, avitaminosis. The body temperature and its regulation. The kidneys and their function. The skin and its working. The endocrine glands. Insulin and its role. The adrenals and their hormones. The thyroid gland and its function. The parathyroid glands. The anterior and posterior lobe of the pituitary gland, their hormones and function. The neurone and its structure. The nervous impulse and its conduction. Conditioned and unconditioned reflexes. The involuntary nervous system and its function. The human brain, its structure and function of the particular parts. The olfaction. The taste. The skin perception. The sight, the eye, its structure and function. The vestibular apparatus. The men's hearing. The function of the ovaries and female sex hormones. The menstrual cycle. The pregnancy, the intrauterine development, placenta and its function, the labour.. the function of the testes, male sex hormone and its effects. The periods of man's lifetime and their characteristic.

Syllabus of entrance exams

PHYSICS

Standard prefixes used to denote multiples of ten

Conversion of metrical units of length, surface and volume, density of water

Kinematics

Newton's laws of motion

Circular motion

Work, energy, impulse of force, momentum

Hydrostatics and hydrodynamics

Isotherm, isobaric and isochoric processes

Laws of thermodynamics

Sound

Current, voltage and resistance, AC and DC current

Basic electrical elements, capacitors, resistors, coils. Series and parallel wiring.

Light, lenses and mirrors, focal equation, microscope, telescope, human eye

The nature of the atom, x-rays

Radioactivity, radioactive decay, half life

CHEMISTRY

Atoms, atomic structure, the periodic table, electron structure, electron configuration and the periodic table

Chemical bonds, ionic and covalent bonds, H-bonds

Chemical names and formulas, chemical equations, the mole Acids and bases,

pH, strong and weak acids and bases Oxidation and reduction

The common inorganic compounds, chemistry of the Earth The

common compounds of H, Na, K, Cu, Ag Water,

concentration of the solutions in mol and % The common

compounds of Mg, Ca, Sr, Ba, Zn, Cd, Hg The common

compounds of B, Al, C, Si, Sn, Pb The common compounds

of A, P, As, Sb, Bi The properties of oxygen The common

compounds of S, Se, Cr, Mo, W The common compounds of

F, Cl, Br, I, Mn The common compounds of Fe, Co, Ni, Os,

Pt

Chemical calculations based on chemical equations, the use of Avogadro's number Organic compounds, aliphatic and aromatic hydrocarbons, isomers, saturated and unsaturated aliphatic

hydrocarbons the common halogen derivatives Alcohols, aldehydes and acids, phenols

and quinones Carboxylic acid derivatives – esters, amides, anhydrides

Heterocyclic derivatives, pyridine, pyrrole, pyrimidine, purine, imidazole and some derivatives

Aminoacids, peptides, proteins

Saccharides – the most important mono-, di- and polysaccharides

Lipids – fats oils, phospholipids, Steroids – cholesterol Nucleic

acids and their components, Vitamins