CALL FOR APPLICATIONS FOR ADMISSION TO THE SINGLE-CYCLE DEGREE COURSE WITH LIMITED ACCESS IN MEDICINE AND SURGERY (Classe LM-41) IN ENGLISH AT HUMANITAS INTERNATIONAL MEDICAL SCHOOL

Academic year 2014/2015

The official source of the Call for Applications is "BANDO DI CONCORSO PER L'AMMISSIONE AL CORSO DI LAUREA MAGISTRALE A CICLO UNICO IN MEDICINA E CHIRURGIA (Classe LM-41) IN LINGUA INGLESE HUMANITAS INTERNATIONAL MEDICAL SCHOOL" in Italian.
This document represents a summary of the call. This document is provided for the convenience of international students. In the event of disputes the parties should refer only to the document in Italian.

Activation of the selection procedures for admission to the one-cycle Degree Course in Medicine and Surgery in English for the Academic Year 2014/2015. Admittance to the Degree Course is subject to selection through the University's admission test.

Art. 1-Number of places available

For the academic year 2014/15, the Decree n. 580 of July 16, 2014 of the Ministry of Education, University and Research together with the Ministry of Health has established n. 100 places available.

Art. 2 -Admission requirements

Italian citizens, EU citizens and EU-equated citizens[1] are admitted to the admission test with equal conditions.
Admission to the test is subject to the possession of a Secondary (High) School Diploma or any foreign qualification obtained after at least 12 years of education, accompanied by the Declaration of Value issued by the Italian diplomatic authorities.

In the event that the local school system provides for 11 or 10 years of schooling, the title is valid when integrated with one or two years of university, having passed all the required exams for those academic years.

[1] EU-equated citizens are:
- the citizens of Norway, Iceland, Liechtenstein, Switzerland, the Republic of San Marino.
- non-EU citizens holding a residence permit for employment or self-employment, for family reasons, political asylum, asylum for humanitarian or religious reasons;
- non-EU citizens legally resident from at least one year in possession of qualifications obtained in Italy.
- non-EU citizens, residing anywhere who hold diplomas from Italian schools abroad or foreign or international schools, having bilateral agreements or special regulations for the recognition of qualifications and who satisfy the general conditions required to be admitted to study in Italy.

A**rt. 3 -Application for the admission test and deadlines**

Registration to the test is done exclusively online by using the University website www.hunimed.eu, starting from **July 17, 2014** until **September 3, 2014**.

Online registration procedure:

1. **Online registration at www.hunimed.eu**: the candidate must register online to get a username and a password; the username and password will be necessary to access the personal page on the portal;
2. **Admission test enrollment:** the candidate must enroll for the admission test by **September 3, 2014** using the username and password.

In order to be entitled to sit the admission test, candidates are requested to pay the test fee which amounts to euro 160,00. Payment shall be performed no later than the last day for the enrollment in the admission test (September 3, 2014). The amount must be paid by bank transfer or credit card.
The enrollment in the test must be done according to the instructions described above, on penalty of exclusion.

The admission Test for the Degree Course in Medicine and Surgery will be held, in Italy, on September 16, 2014 at **MEDIOLANUM FORUM, via Giuseppe Di Vittorio 6 Assago (MILAN)** and consists in a quiz test according to the syllabus and procedures described in articles 5 and 6 of this Competition Call.

The candidate can sit the examination at the location designated for Italy or at a number of selected locations abroad. The location of the test must be selected on the online portal. The choice is irrevocable.
If students wish to take the test abroad must also indicate the location choosing among the ones on the website and listed below.

Centre Number	Country	City	Adress	Centre Name	Start time (local time)
IT511	Italy	Milan	via Giuseppe Di Vittorio 6 Assago (MILANO)	Humanitas University c/o Mediolanum Forum	14.00
AT040	Austria	Vienna	Siebensterngasse 21 WIEN 1070	British Council	14.00
CY011	Cyprus	Nicosia	177 Kopegchakis Street Lakatamia 2306 Nicosia	Pascal Education Ltd	15.00
FI001	Finland	Helsinki	Fredrikinkatu 20 A 9 00120 Helsinki	Finnish-British Society	15.00
FR500	France	Paris	38 quai de l'Ecluse 78290 Croissy-sur-Seine Paris	The British School of Paris	14.00
DE007	Germany	Hamburg	Staatliche Fremdsprachenschule Mittelweg 42a, Hamburg	Cambridge Examinations Centre Hamburg	14.00
DE010	Germany	Munchen	Hildegardstrasse 8 80539 Munchen	Cambridge Institute	14.00
GR804	Greece	Athens	23a Veranzerou Street Athens 104 32	Hellenic English Council	15.00
IS002	Iceland	Reykjavik	Menntavegur 1, 101 Reykjavik	Reykjavik University	12.00
IE070	Ireland	Dublin	1 Tuansgate Belgard Sq East Tallaght Dublin 24	Dublin and Dún Laoghaire ETB	13.00
MT012	Malta	Valletta	Republic Street VLT 1117 Valletta	The Malta Chamber of Commerce Enterprise and Industry	14.00
NL032	Netherlands	Alkmaar North Holland	Kruseman van Eltenweg 4 Alkmaar North Holand 1817 BC	Horizon College	14.00
NO002	Norway	OSLO	Torggata 7, Post Boks 496, Sentrum Oslo 0105	Folkeuniversitetet in OSLO	14.00
ES439	Spain	Barcellona	Freixa, 5-9 08021 Barcelona	Exams Catalunya	14.00
SE011	Sweden	Stockholm	Kungstensgatan 45 113 59, Stockholm	Folkuniversitetet	14.00
CH059	Switzerland	Winterthur Zurich	Zucher Strasse 46 Winterthur Zurich CH-8400	Cambridge ESOL Examination Centre	14.00
10310	United Kingdom	London	55 East Road, London N1 6AH	The City College	13.00
32143	United Kingdom	Manchester	Bromley Cross Road, Bromley Cross, Manchester BL7 9LT	Turton High School Media Arts College	13.00

Art. 4 - Candidates with disabilities

Candidates with any kind of disability in need of extra means of support must formally request the support they will need for this test in relation to the extent of their disability. Candidates with learning disabilities can request the special terms foreseen from the Ministerial Decree to guarantee equal opportunities during the test, be it also further time for completing the test.
Among the candidates with disabilities the following should be considered: candidates who are blind, suffering from absolute blindness or a sight not exceeding one tenth in both eyes; candidates who are deaf, from birth or before learning to speak; candidates with percentage of civil disability equal to or higher than 66%, candidates with handicap certificate of disability according to Law

104/92 as amended by Law 17/99. Disabilities must be certified by appropriate medical certificate issued by the competent health authorities.
Among the candidates with learning disabilities the following should be considered: candidates affected by dyslexia, dysgraphia, dyscalculia, dysorthography, certified by appropriate medical certificate, issued no earlier than 3 years ago by National Health Service, by specialists or by accredited medical institutions, if approved by the Regions. The further time for completing the test for candidates with learning disabilities will be in the measure of 30% compared to the standard time for the test, pursuant to the Ministerial Decree DM 5669/2011.
These requests must be specified when enrolling in the admission test on the website and the medical certificates should – **preferably** - be attached in electronic format. Alternatively, the documentation can be sent to the email address info@hunimed.eu or posted using recorded delivery mail (*raccomandata RR*) within the test enrollment deadline to the Student Office in via Manzoni 113, 20089 Rozzano (MI).

Art. 5 - Syllabus

The admission test to the one-cycle Degree Course in Medicine and Surgery in English is arranged using Cambridge Assessment.
In the admission test students are required to answer sixty (60) questions with five response options, of which the candidate will have to choose one only, discarding the wrong, arbitrary or less likely conclusions. On the basis of the programs listed in Annex A, which is an integral part of the present Call for Applications, the questions are divided as follows:
- General culture (4 questions)
- Logical reasoning (23 questions)
- Biology (15 questions)
- Chemistry (10 questions)
- Physics and Mathematics (8 questions)

Art. 6 - Location and procedure for the admission test

In Milan, the test will start at 14.00 pm. Candidates will have 100 minutes to complete the test. Candidates must present at 11.00 am for identification and registration with a valid identity document – identity card or passport – on penalty of exclusion.

Candidates will be assigned a seat in the different sectors of MEDIOLANUM FORUM according to their age, except for twins.

For those sitting the test in any of the locations abroad, address, time and locations are displayed on Humanitas University website. Candidates must arrive in the location in advance for registration procedures. The test will start according to the time indicated in art. 3.

It will be possible to leave the test room 30 minutes before the end of the test.

Art. 7- Test assessment

According to the number of places available for the enrollments, Italian citizens, EU citizens and EU-equated citizens are admitted to the Degree Course in descending order based on their score and provided that they obtained a minimum score of twenty (20) points.

The scores are assigned as follows:

- 1,5 point for each correct answer
- -0,4 points for each incorrect answer
- 0 points for each non given answer.

The highest achievable score is 90 points.

In case of a draw, the following criteria are applied:

a) the points scored by the candidates respectively in the logic and problem solving subjects, general culture, Biology, Chemistry, Physics and Mathematics will prevail in descending order.

b) the possession, by the test enrollment deadline of the language certificates, as indicated in Annex B. No prevalence will be given to candidates that, despite having passed the language exam, do not have any official certificate by the enrollment deadline.

c) in case of further draw, the youngest student will prevail.

Art. 8 - Delivery of the admission test

Each candidate will be given at the beginning of the test a folder containing:

a) a module to be filled in with the personal details with a univocal barcode;
b) the questions of the admission test;
c) two answer sheets, both with the same barcode, which is also the same of the module with the personal details;
d) an empty windowed envelope;
e) a sheet with the pre-printed identification code of the test;

During the test, the following rules must be respected:

- the student must fill in the module with the personal details and sign it;
- for the compilation of the answer sheet candidates should use a black pen which will be given to each candidate after the identification and registration;
- candidates are allowed to correct one (and only one) question they have already answered, making sure to completely blacken the previously marked box and to choose another one: there must be in any case only one mark in only one of the five boxes in order to get the score;
- the answer sheet has, next to the numbers of the questions, a small circular shape that the student must blacken to prove his intention not to answer the question. This indication, once it has been done, is no longer modifiable**;** if the candidate does not make any sign of

response in the answer boxes, even if the circular figure is blackened, the answer is not valid;

- the candidate must nullify, by marking the entire sheet and blackening the barcode, the second answer sheet which will not be used for correction purposes.
- at the end of the test, the candidate must insert, into the windowed envelope only the answer sheet, **unfolded**, which will be used to determine the score, and must close the envelope when handing it in.
- the candidates must hand in, separately, the second answer sheet, not used and nullified, together with the sheets containing the questions of the test and the module with the personal details to the President or to the Supervisor.

The Supervision Committee will disqualify the candidate if:

- the module with the personal details is inserted into the envelope;
- the envelope containing the answer sheet and the answer sheet itself are signed or marked by the candidate or by a member of the supervision committee.

In those cases, Cambridge Assessment will not correct the test and will not calculate the score.

During the test, candidates will not be allowed to talk to anyone apart from the staff and supervision Committee. Candidates will also not be allowed to keep personal belongings with them such as bags, books or notes, dictionaries, paper, pen, mobile phones, calculators or any electronic device; candidates will be given indications for storing these items in a specific place. Anyone found in possession of the above mentioned items during the test will be disqualified. The Supervision Committee will make sure that rules are respected and will act accordingly if any violation occurs.

Art.9 - The ranking list

After the test has been corrected, one ranking list will be published by Humanitas University according to the procedure described in art 7 of this document, on **September 26, 2014** on the website www.hunimed.eu, maintaining the anonymity. The students will be able to see their position in the ranking list through the pre-matriculation number generated during the enrollment procedure. Moreover, using the *the username* and *password* obtained during the registration on the portal, every candidate can see their score accessing their personal page.

Art.10 – Enrollment and reserve list

Admitted candidates according to the ranking list will find the notices concerning enrollment on the University website from July 30, 2014. Online enrollment will be possible from September 27, 2014 until October 7, 2014. **The first instalment must be paid mandatorily within October 7, 2014.**

From October 9, 2014 following the test ranking, the University will begin the admission of the candidates whose position in test ranking was beyond the first 100 and did not enroll by October 7, 2014. Available places will be published on Humanitas University website the day before the

opening of the reserve lists. Eligible candidates must enroll and pay the first instalment within two working days from each specified reopening day by 6.00 p.m. of the second day. Candidates will be called and admitted according to their position in the reserve list until there are free places available.

Final deadline for the call of candidates in reverse list is **December 31, 2014**.

Art.11 – Completion of enrollment

The procedures and timing for the completion of enrollment will be available on Humanitas University portal from July 30, 2014. Students are obliged to go on with the enrollment and the payment of the first instalment according to art. 10 of this Call for Applications.

Art. 12 – Responsible for the procedure

The person in charge of the procedure is Dr. Massimiliano Laganà (General Manager of Humanitas University), email info@hunimed.eu. For further information candidates can call to the Student Office tel. 02/82243777.

Art. 13 – Table of deadlines

Beginning of test enrollment	17/07/2014
Deadline of test enrollment	3/09/2014
Publication on the portal of the university enrollment procedure	30/07/2014
Admission test	16/09/2014
Publication of ranking list	26/09/2014
Beginning of enrollments	27/09/2014
Deadline of enrollment and payment of first instalment	7/10/2014
Reserve list according to art. 10	9/10/2014
End of reserve list and admissions	31/12/2014

Annex A
Syllabus regarding the content of the admission test to the single-cycle Degree Courses in Medicine and Surgery, in Dentistry, Veterinary Medicine and the degree courses in other medical professions

For the admission to the courses it is required to hold a general culture, in the field of literature, history, philosophy, social and institutional studies, as well as the ability to analyze written texts of various kinds and logical and mathematical reasoning skills.
The knowledge and the skills required are, however, those promoted by educational institutions that organize educational and teaching activities consistent with the Ministerial Programs, especially in view of the State Examinations and also refer to the scientific disciplines of Biology, Chemistry, of Physics and Mathematics.

General knowledge and logical reasoning

Assessment of the ability to properly use the language used in the courses and delivery of a complete logical reasoning, in a manner consistent with the premises, which are set out in symbolic or verbal form through multiple-choice questions formulated with short sentences, discarding the wrong, arbitrary or less likely conclusions.
The questions will focus on scientific or narrative classical or contemporary non-fiction texts, or on texts appeared in newspapers or on generalist or specialist magazines; the questions will also focus on cases or problems, even abstract in nature, the solution of which requires the adoption of different forms of logical reasoning.
Questions related to general knowledge, dealt with in the study curriculum, complete this field of evaluation.

Biology

The chemistry of the living.
The biological importance of weak interactions.
The organic molecules found in living organisms and their functions. The role of enzymes.
The cell as the basis of life.
Cell theory. Cell size. The prokaryotic and eukaryotic cell, animal and plant.
Viruses.
The cell membrane.: Structure and functions - transport through the membrane.
Cellular structures and their specific functions.
Cell cycle and cell division: mitosis and meiosis - chromosomes and chromosome maps.
Bioenergetics.
The energy assessment of cells: ATP.
Redox reactions in living things.
The energetic processes: photosynthesis, glycolysis, aerobic respiration and fermentation.
Reproduction and Inheritance.
Life cycles. Sexual and asexual reproduction.
Mendelian Genetics. Fundamental laws and applications.
Classical genetics: chromosome theory of heredity; patterns of inheritance.
Molecular Genetics: structure and replication of DNA, the genetic code, the protein synthesis

The DNA of prokaryotes. The structure of the eukaryotic chromosome. Genes and regulation of gene expression.
Human genetics: transmission of mono-and multifactorial characters; hereditary diseases linked to the X chromosome and autosomal
Biotechnology: Recombinant DNA technology and its applications.
Heredity and environment.
Mutations. Natural and artificial selection. Evolutionary theories. The Genetic basis of evolution.
Anatomy and physiology of animals and man
The animal tissues
Anatomy and physiology of systems and equipment in humans and their interactions.
Homeostasis.

Chemistry

The constitution of matter: states of matter; heterogeneous systems and systems homogeneous; compounds and elements.
Ideal Gas Laws
The structure of the atom: elementary particles; atomic number and mass number, isotopes, electronic structure of atoms of different elements.
The periodic system of elements: groups and periods; transition elements; periodic properties of the elements: atomic radius, ionization potential, electron affinity; metallic character. Relations between electronic structure, position in the periodic system of elements and properties.
Chemical bonding: ionic bonding, covalent bonding and metallic bonding. Energy binding. Polarity of bonds. Electronegativity.
Fundamentals of inorganic chemistry: nomenclature and main properties of inorganic compounds: oxides, hydroxides, acids, salts.
The chemical reactions and stoichiometry: molecular and atomic mass, Avogadro's number, mole concept and its application, stoichiometry elementary balance of simple reactions, the different types of chemical reaction.
The solutions: solvent properties of water; solubility; The main ways of expressing the concentration of solutions.
Equilibria in aqueous solution**.**
Elements of chemical kinetics and catalysis.
Oxidation and reduction: oxidation number, the concept of oxidant and reductant.
Balance of simple reactions.
Acids and bases: concepts of acid and base; acidity, neutrality or alkalinity of aqueous solutions; the pH. Hydrolysis. Buffer solutions.
Fundamentals of organic chemistry: bonds between carbon atoms; formulas and rough texture, concept of isomerism. Aliphatic, alicyclic and aromatic hydrocarbons. Functional groups: alcohols, ethers, amines, aldehydes, ketones, carboxylic acids, esters, amides. Elements of nomenclature.

Physics

The measures: direct and indirect measures, fundamental and derived quantities, physical dimensions of quantities, knowledge of the metric system and the CGS System of Units,

Technician (or Practical) (ST) and International (SI) units of measurement (names and relations between fundamental and derived units), and multiples (names and values).
Kinematics: kinematic quantities, various motions with particular regard to uniform and uniformly accelerated motion; uniform circular motion; harmonic motion (for all motions: definition and relationship between the kinematic quantities related).
Dynamics: vectors and vector operations. Forces, moments of forces about a point. Vector composition of forces. Definitions of mass and weight. Acceleration of gravity. Density and specific gravity. Law of universal gravitation, 1st, 2nd and 3rd law of motion. Work, kinetic energy, potential energy. Principle of conservation of energy. Impulse and momentum. Principle of conservation of momentum.
Fluid mechanics: pressure, and its unit of measure (not only in the SI system). Archimedes' principle, Pascal and Stevin's laws.
Heat and thermodynamics: thermometry and calorimetry. Specific heat, thermal capacity. Mechanisms of heat propagation. Changes of state and latent heats. Ideal Gas Laws. First and second law of thermodynamics.
Electrostatics and electrodynamics: Coulomb's law. Electric field and potential. Dielectric constant. Capacitors. Capacitors in series and in parallel capacitors. Current. Ohm's law. Electrical resistance and resistivity, electrical resistors in series and in parallel. Work, Power, Joule effect. Generators. Electromagnetic induction and alternating currents. Effects of electric currents (thermal, chemical and magnetic).

Mathematics

Sets of numbers and algebra: natural numbers, integers, rational and real numbers. Sorting and comparison; order of magnitude and scientific notation. Operations and their properties. Proportions and percentages. Powers with integer exponents, rational and their properties. Radicals and their properties. Logarithms (base 10 and base e) and their properties. Elements of combinatorics. Algebraic expressions, polynomials. Major products, n-th power of a binomial, factoring polynomials. Algebraic fractions. Algebraic equations and inequalities of the first and second grade. Systems of equations.

Functions: fundamental notions about the functions and their graphical representations (domain, codomain, sign, maxima and minima, and monotonicity, etc..). Elementary functions: algebraic integer and fractional, exponential, logarithmic, trigonometric. Composite functions and inverse functions. Trigonometric equations and inequalities.

Geometry: Polygons and their properties. Circumference and circle. Measurements of lengths, areas and volumes. Isometries, similarities and equivalences in the plan. Loci. Measure of angles in degrees and radians. Sine, cosine, tangent of an angle and their significant values. Trigonometric formulas. Solving triangles. Cartesian reference system in the plane. Distance between two points and the midpoint of a segment. Equation of the line. Terms of parallelism and perpendicularity.
Distance of a point from a line. Equation of the circle, the parabola, hyperbola,
of the ellipse and their representation in the Cartesian plane. Pythagorean Theorem.

Probability and Statistics: Frequency distributions depending on the type of character and the main graphical representations. Definition of random experiment and event. Probability and frequency.

Annex B

List of language certificates accepted pursuant to art.3 comma 4, letter b, of the DM. 140/2014.

(Accredited) Certification Body.	Level	English certificate testing the 4 skills
Cambridge English Language Assessment	C2	Cambridge English: Proficiency (CPE)
	C1	Cambridge English: Advanced (CAE)
		Cambridge English: Business Higher (BEC Higher)
	B2	Cambridge English: First (FCE)
		Cambridge English: Business Vantage (BEC Vantage)
City and Guilds (Pitman)	C2	Level 3 Certificate in International ESOL Diploma Mastery C2
	C1	Level 2 Certificate in International ESOL Diploma Expert C1
	B2	Level 1 Certificate in International ESOL Diploma Communicator B2
Edexcel/Pearson Ltd	C2	PTE General Level 5 Proficient
	C1	PTE General Level 4 Advanced
	B2	PTE General Level 3 Upper Intermediate
EDI (LCCIEB)	C1	JETSET Level 6
		English for Business Level 4
	B2	JETSET Level 5
		English for Business Level 3
		English for Commerce Level 3
IELTS	C2	IELTS band 8.5-9.0
	C1	IELTS band 7.0-8.0
	B2	IELTS band 5.5-6.5
TCL Trinity College London	C2	Integrated Skills in English (ISE) IV
	C1	Integrated Skills in English (ISE) III
	B2	Integrated Skills in English (ISE) II
TOEFL ETS	C1	TOEFL score 110-120
	B2	TOEFL score 87-109

Attendance, past or ongoing, of at least one year in a school where English is the teaching language is considered a valid equivalent to a language certificate pursuant to Article 3, paragraph 4, letter b of the Ministerial Decree 140/2014.