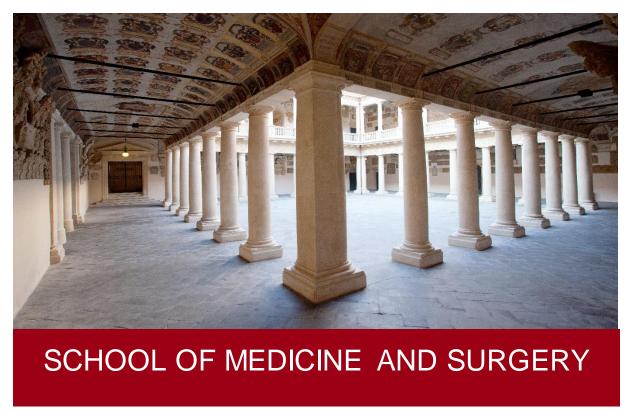
CENTRAL ADMINISTRATION

TEACHING AND STUDENT SERVICES AREA STUDENT CAREER OFFICE





NOTICE OF ADMISSION FOR YEARS AFTER THE FIRST A.Y. 2022/23

Single-Cycle Master's Degree Course in English

MEDICINE AND SURGERY

NOTE: The index is clickable and refers to the paragraphs in the text to make navigation easier. However, we recommend paying attention to the information contained in the entire admission notice.

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INTRODUCTION

The selection procedure is now open for admission to years subsequent to the first year in the single-cycle Master's Degree Course in Medicine and Surgery for the academic year 2022/2023.

Only candidates who have submitted a prior application for the assessment of their credits (Art. 15 of the Student Career Regulations issued by D.R. (Rectoral Decree) 2125/2020 of25/06/2020) may apply and if they have obtained a resolution on the basis of which they are eligible for admission to a year after the first year, in accordance with point 6 of the notice for admission to the single-cycle master's degree with limited access in Medicine and Surgery taught in English a.y. 2022/2023, provided that there is documented availability of places at the University for the course year for which admission is proposed.

1. PLACES AVAILABLE

The places that have become available for the Medicine and Surgery course of study for the academic year 2022-2023, as a result of student withdrawals or transfers to another university, or to another course of study, are as follows:

2nd year: 0 places3rd year: 0 places4th year: 1 place.

2. APPLICATION FOR PRIOR CREDIT ASSESSMENT AND ASSESSMENT BY THE COMMISSION

In accordance with point 6 of the notice for admission to the single-cycle master's degree with limited access in Medicine and Surgery, taught in English, academic year 2022/2023, and with the provisions of Article 15 of the Student Career Regulations issued by D.R. (Rectoral Decree) 2125/2020 of 25/06/2020, all candidates who intend to apply for a recognition of credits for the career shortening for the single-cycle master's degree with limited access in Medicine and Surgery, taught in English must have submitted an application for the prior assessment of credits from 16 June to 3.00 p.m. on 18 July 2022 according to the information given at www.unipd.it/domanda-valutazione. The Commission collects the submitted applications for prior assessment of credits, establishes which activities and CFUs are recognisable and determines which course year each candidate is eligible for and informs them by enabling them to view online the resolution pertaining to each of them.

Only training activities already undertaken and registered at the University of origin at the time the application is submitted will be assessed and for which the student has provided

documentation on the course content (syllabuses and scientific disciplinary sector where applicable). The enrolment of a student from an EU or non-EU university in a year subsequent to the first year will be subject to verification of the educational programme already completed, with particular regard to the specific features of the degree course, the examinations taken, the theoretical studies completed and the practical experience acquired at the University of origin

On specific subjects, the Commissions may call on the cooperation of the heads of the individual teaching subjects and teaching modules.

3. ADMISSION TO YEARS SUBSEQUENT TO THE FIRST

3.1 Eligibility

Admission to a year of the course subsequent to the first is decided by the commission by assessing the applications for credit recognition on the basis of the provisions in the Course Regulations of the single-cycle master's degree in Medicine and Surgery, Annex 3 "Regulations for the recognition of university credits (CFUs)" https://didattica.unipd.it/didattica/allegati/regolamento/allegato3/1008816.pdf and is bound to a minimum number of recognisable CFUs as per the table below:

Eligibility for the course year	Minimum required recognisable CFUs
2 °	30
3 °	80
4 °	130

3.2 Entry Test

Should the number of candidates eligible for years subsequent to the first year exceed the number of places available in the year in question, a ranking will be drawn up on the basis of the outcome of a test to assess the knowledge acquired, which will take place on **29/09/2022**, at **12.00 noon**, using the online platform.

The list of candidates admitted to the test for the 4th year of the course will be published at https://www.unipd.it/ammissioni-medicine-surgery twenty days before the date of the test.

A document containing the information to take part in the test will be published on the https://www.unipd.it/ammissioni-medicine-surgery page by **21 September 2022**, namely:

- the exact times for attendance to sit the entry test;
- the devices required and the minimum technical specifications needed to take the test;
- the procedures and regulations to be followed during the test;

- information on the possibility of testing the procedure in advance in order to ensure that the test is conducted correctly.

N.B.: these publications count as an official communication to the interested parties.

To take part in the test, candidates must submit their pre-enrolment application by 12 noon on 21/09/2022 by logging on to the website www.uniweb.unipd.it.

If not already in possession of credentials to access the www.uniweb.unipd.it portal, candidates must proceed with the registration of their personal data at https://uniweb.unipd.it/AddressBook/ABStartProcessoRegAction.do

At the end of the registration procedure, candidates will receive a user name and activation code by e-mail, with which they must log on to the page https://uniweb.unipd.it/password/index.php/it/utenti/identifica/azione/a page, select their three security questions and set a password.

With the user name and password obtained, candidates can access the reserved area of the portal https://uniweb.unipd.it via Login.

After accessing the website, candidates then access the pre-enrolment application by clicking on the headings *Home > Pre-enrolment for limited access degree programmes > → Type of degree programme "Single-cycle 6-year master's degree" → Admission to years subsequent to the first year on the single-cycle master's degree course in Medicine and Surgery.*

After the peremptory deadline of 12.00 noon on 21/09/2022, the connection will be deactivated and it will no longer be possible to fill in an application for the test.

The service may be temporarily suspended for technical updating reasons.

In the event of difficulties, candidates may call the University Call Centre from Monday to Friday from 9 a.m. to 5 p.m. on 049/8273131 or write to the email address immatricolazioni.studenti@unipd.it. Further support channels may be specified at www.unipd.it/immatricolazioni.

The **test** consists of multiple-choice questions (four answer options of which only one is correct). The questions will relate to the topics of the educational activities envisaged in the study programme at the University of Padua in the year(s) preceding the one for which the transfer is requested.

The test set by the Examination Commission will consist of 60 questions in English on the topics listed in the following table:

ADMISSION TO THE 4th YEAR		
Topics	no. of questions	

Laboratory Medicine	20
Infectious diseases	10
General Pathology	10
Internal Medicine	10
Pharmacology	10
Total questions	60

The programmes are set out in Annex 1, which forms an integral part of this notice. A time of **1 hour and 30 minutes** is allotted for completing the test.

The test will be assessed by the special Commission based on the following criteria:

- 1 point for each correct answer
- 0.25 points for each wrong answer
- 0 points for answer not given

In the event of a tie, the candidate with the highest number of credits recognised in the evaluation commission's decision relating to examinations or activities actually completed by the deadline for submitting the prior application for credit assessment shall have precedence.

In the event of a further tie, the youngest candidate will have precedence.

4.3 Personalised test request (disability and SLDs)

Candidates with **disabilities or specific learning disorders (SLDs)** may take the tests with customised support, making an explicit request to the **Student Services Office - Inclusion Sector**. To this end, interested candidates must:

- 1) request the individualised test within the pre-enrolment procedure in Uniweb;
- 2) send an email to inclusione.studenti@unipd.it specifying the supports, aids or compensatory measures required. Any additional time allocated may not exceed 50% more (candidates with disabilities) and 30% more (candidates with SLD) than the time allocated for the test;
- 3) send a certified copy of the original documentation relating to the disability or SLD to the Student Services Office Inclusion Sector <u>with a readable scan</u> to email (<u>inclusione.studenti@unipd.it</u>), together with a copy of a valid identification document by 3 p.m. on 21 September 2022. The form to be filled in for submission can be found at <u>www.unipd.it/accoglienza-prove-ingresso</u>.

Candidates may be admitted to the test with the medical certification they possess, even if it is not up-to-date on account of the limitation of NHS services due to

the Covid-19 emergency, subject to the Universities' right to subsequently request the integration of the required documentation.

Documentation that may be useful in applying for customised supports include:

- civil invalidity certificate and/or certification pursuant to Legge (Law) no. 104 of 1992 issued by the competent medical commission for the area, proving the type of disability (with description of the diagnosis) and/or the recognised percentage of invalidity;

- certified diagnosis of SLD (issued no more than 3 years previous, or renewed by adults, by facilities of the National Health System or by specialists and facilities accredited to issue it).

Applicants with a disability, invalidity or SLD from EU and non-EU countries residing abroad who wish to benefit from the measures referred to in the previous paragraphs must submit the certification attesting to their disability, invalidity or SLD status issued in their country of residence, accompanied by a sworn translation or a translation certified by the Italian diplomatic services as conforming to the original text, in Italian or English.

Based on the documentation presented, the test media will be evaluated, following a possible interview with dedicated personnel and with methods to be agreed upon.

It is therefore advisable to contact the Student Services Office - Inclusion Sector well in advance of the test date, by sending an email to inclusione.studenti@unipd.it.

More information is available at www.unipd.it/accoglienza-prove-ingresso.

5. PUBLICATION OF RANKING LIST AND APPLICATION FOR ENROLMENT

The ranking list will be published at https://www.unipd.it/ammissioni-medicine-surgery on or after 6/10/2022. Winners must accept their assigned place within the deadline and according to the detailed instructions that will be published at the same time.

Failure to submit such documentation is tantamount to renouncing the place.

If, after this deadline, further vacancies arise due to successful candidates withdrawing, the allocation operations will continue by direct call from the Student Careers Office - Enrolment Sector, according to the order in the ranking list.

6. STUDENTS IN POSSESSION OF A FOREIGN QUALIFICATION

Students holding a foreign qualification are admitted according to the provisions of the Ministry of University and Research, available at www.mur.gov.it/it - University - Foreign Students, after passing the required tests and submitting the necessary documentation.

For further information, please contact the Admissions and Welcome Department of the Global Engagement Office, email international.admission@unipd.it.

6.1 Registration procedure for EU or non-EU candidates residing in Italy

Citizens of Norway, Iceland, Liechtenstein, Switzerland and the Republic of San Marino shall be treated as Community nationals. Non-EU candidates residing in Italy will be admitted subject to verification of their residence permit.

To participate in the selection for access to the course, candidates are required to:

- 1. **pre-enrol** in the https://www.uniweb.unipd.it/ portal according to the methods and schedules indicated in this notice (point 4);
- take the entrance test according to the methods and schedules indicated in this notice (point 4);

Eligible candidates wishing to enrol must:

- submit the necessary documentation for the verification of the validity of the admission qualification and of the previous career that will be assessed for the purpose of career shortening as indicated at www.unipd.it/studiare-italiano-immatricolarsi to the Admission and Welcome Department of the Global Engagement Office by email international.admission@unipd.it with the subject line "Medicine and Surgery subsequent years";
- submit the application for online enrolment in the <u>www.uniweb.unipd.it</u> portal and make payment of the first instalment in the manner and within the terms indicated in this notice (point 5);
- 3. have the Admissions and Welcome department of the Global Engagement Office view the planned original documentation, according to the methods that will be indicated on the www.unipd.it/studiare-italiano-immatricolarsi page.

Candidates are exempt from the Italian language test pursuant to d.lgs. (Legislative Decree) no. 286/98, Article 39, paragraph 5, as amended.

Failure to submit documentation, the submission of incomplete documentation or the submission of an unsuitable qualification will prevent the offices from completing enrolment.

6.2 Registration procedure for non-EU candidates residing abroad

To participate in the selection for access to the course, candidates are required to:

- 1. **pre-register in the Universitaly portal** www.universitaly.it/index.php/dashboard, indicating the University of Padua (*Università degli Studi di Padova*) and the course of study you are interested in. Pre-registration is necessary to apply for a study visa at the Italian diplomatic representation in your country of residence;
- 2. submit an application for recognition of credits (point 2);
- 3. **pre-enrol** in the <u>www.uniweb.unipd.it/</u> portal according to the methods and schedules indicated in this notice (point 4);
- **4.** take the **entrance test** according to the methods and schedules indicated in this notice (<u>point</u> 4);
- 5. demonstrate knowledge **of the Italian language at level B2** by 30 September 2021; a test of knowledge of the Italian language not required in the cases indicated in the ministerial guidelines www.studiare-in-italia.it/studentistranieri/ will be held as indicated at www.unipd.it/prova-conoscenza-lingua-italiana

Eligible candidates wishing to enrol must:

- submit the necessary documentation for the verification of the validity of the admission qualification and of the previous career that will be assessed for the purpose of career shortening as indicated at www.unipd.it/studiare-italiano-immatricolarsi to the Admission and Welcome Department of the Global Engagement Office by email international.admission@unipd.it with the subject line "Medicine and Surgery subsequent years";
- 2. submit the application for online enrolment in the www.uniweb.unipd.it portal and make payment of the first instalment in the manner and within the terms indicated in this notice (point 5);
- 3. have the Admissions and Welcome department of the Global Engagement Office view the planned original documentation, according to the methods that will be indicated on the www.unipd.it/studiare-italiano-immatricolarsi page.

Failure to submit documentation, the submission of incomplete documentation or the submission of an unsuitable qualification will prevent the offices from completing enrolment.

7. PERSON RESPONSIBLE FOR THE PROCEDURE, PERSONAL DATA, NOTES AND WARNINGS

- 1) Pursuant to Article 4 of Law 241 of 7 August 1990 (New rules on administrative procedures and right of access to administrative documents) and subsequent amendments, the Director of the Student Career Office, Dr Maria Chiara Ferraresi shall be appointed as the person responsible for the administrative access procedure.
- 2) Person Responsible for the Procedure for Accessing Documents: Director of the Student Career Office, Dr. Maria Chiara Ferraresi. Candidates have the right to exercise their right of access to the application documents according to the provisions of the *Decreto del Presidente della Repubblica* (Italian Presidential Decree) no. 184 of 12 April 2006.
- 3) Simultaneous registration: the rules governing simultaneous registration can be viewed at www.unipd.it/avvisi-amissione-corsi.
- 4) Current legislation on declarations: in the event that the documentation submitted by the candidate contains false or untrue declarations, without prejudice to the penalties provided for by the *codice penale* (Italian Criminal Code) and the special laws on this matter (Articles 75 and 76 of D.P.R. [Italian Presidential Decree] 445/2000), the candidate's enrolment shall cease ex-officio. The University will recover any benefits granted (e.g. scholarships) and will not reimburse the fees paid. Finally, a false declaration will entail exposure to an action for damages brought by the counterparties.

- 5) Personal data provided by candidates, collected for the purposes set out in this Notice, shall be processed in compliance with the provisions of EU Regulation no. 679 of 27.04.2016 (the General Data Protection Regulation, GDPR), and the policy available at www.unipd.it/informativa-studenti.
- 6) Further general information on the current regulations for admission can be found on the www.unipd.it/avvisi-ammissione-corsi page.

Any changes or additions to the content of this Admission Notice will be:

- published in the official register of the University;
- ♦ announced on the University's web pages, at www.unipd.it/avvisi-amissione-corsi
 For any matters not specified in this Notice of Admission, reference is made to the regulations in force and, in particular, to D.M. (Ministerial Decree) no. 583 of 24 June 2022 "Procedures and contents of the entry tests for degree courses and single-cycle master's degree in Italian with limited access at national level a.y. 2022/2023" and its annexes.

Padua, 29/07/2022

The Rector
Prof. Daniela Mapelli
digitally signed pursuant to D.lgs (Legislative Decree) no. 82/2005

APPENDIX 1

Programmes for testing acquired knowledge and skills for admission to the 2nd year (60 questions on the topics listed in the table in section 4)

MEDICINA DI LABORATORIO - LABORATORY MEDICINE

- Biochemical and molecular basis of the main diseases and principles of analytical methodologies.
- Analytical and biological variability, precision and analytical accuracy, and diagnostic accuracy. Prescriptive appropriateness. Diagnostic errors and systems for their prevention. Issues of the request and interpretation of the main biomarkers and their value in diseases with higher prevalence (metabolic, cardiovascular, neoplastic, autoimmune and gastroenterological diseases);
- Principles of microbiological diagnosis: pre-analytical, analytical and post-analytical phases;
- Interpretation of anti-microbial susceptibility tests;
- Microbiological diagnosis applied to respiratory tract infections; urinary tract infections; central nervous system infections; septicemia, endocarditis, catheter-related infections; gastroenteritis; sexually-transmitted infections; infections of skin, bones and soft tissues.

MALATTIE INFETTIVE - INFECTIOUS DISEASES

The course aims to provide updated information to allow the recognition of the most important infectious syndromes; the pathologies caused by the main infectious agents and the infectious pictures in the immunocompromised patient and in the hospitalized patient will be treated, deepening the criteria for choosing and using the diagnostic opportunities and the principles of antimicrobial therapy. The following topics will then be covered: Localized infections, with particular reference to the central nervous system and lung, Sepsis and septic shock, infectious endocarditis, acute enteritis, infectious hepatitis, osteoarticular infections, urinary tract infections, acquired immunodeficiency syndrome (AIDS), infections in the immunocompromised patient. Whooping cough, diphtheria; diseases caused by clostridia, mycobacteria, spirochetes, Chlamydiae, Rickettsiae, viruses that affect the respiratory system, including SARS-CoV-2, herpes, measles, mumps, arboviruses, prions. Main fungal infections (candidiasis, aspergillosis, pneumocystosis, cryptococcosis). Notes on protozoal and helminth diseases. Reference will also be made to infectious agents not common in Italy but widespread in other geographical areas. Prevention of their spread and possibility of containment or eradication. In particular, epidemic and endemic infectious outbreaks present in countries with poorly equipped health care systems, vaccinations, diagnostics and treatment of infections in the fragile population will be treated. The following topics will also be studied in depth: microbial pathogenicity, the host-parasite relationship, the immune response to infections: innate and acquired immunity, the rational approach to fever of unknown origin, exanthematous manifestations, infections affecting the skin, blood and lymphatic organs, CNS, heart and vessels, oropharynx, liver and gastrointestinal tract, respiratory and

urogenital tract. Other topics of the course will cover sexually transmitted infections, infections in pregnancy, immunosuppressed and organ transplant infections, nosocomial and community infections, the epidemiology of antimicrobial resistance. The course also aims to deepen the knowledge on the main laboratory methods for the diagnosis of diseases caused by viruses, bacteria, protozoa and fungi, on the interpretation of the results of these investigations, on the monitoring and appropriateness of antimicrobial therapy, on vaccinology and development of innovative antimicrobial drugs and therapies.

PATOLOGIA GENERALE - GENERAL PATHOLOGY

CELLULAR AND MOLECULAR PATHOLOGY

Agents causing cell damage.

Physical agents: ionizing radiations and UV light.

Chemical agents: poisons, drugs, others. ROS and oxidative stress. Biological damage: bacterial toxins.

Cellular response to cell damage and stress.

Reversible and irreversible cellular damage (adaptation and cell death).

Cellular adaptations including autophagy, atrophy, hypertrophy, hyperplasia, metaplasia and displasia. Cellular stress responses and organelles (UPR, mtUPR, ISR). Metabolic stress, the cellular basis of metabolic syndrome. Cellular deposits: steatosis, amyloidosis, proteotoxic neurodegenerative diseases (Alzheimer's, Parkinson's, Huntington's disease).

Different types of cell death. Regulated (apoptosis, necrosis, necroptosis and other forms) and accidental cell death.

Molecular basis of genetic disease (examples of monogenic diseases: Examples of monogenic diseases and new therapeutic frontiers: Marfan syndrome, Familial hypercholesterolemia, Cystic fibrosis, Muscular dystrophies, Glycogenosis, Defects of amino acid metabolism.)

TISSUE RESPONSES TO INJURY: THE INNATE IMMUNE SYSTEM AND INFLAMMATION

The innate immune system and disease. Immune signalling Acute inflammation: vascular and cellular phenomena.

Chemical mediators of inflammation.

Inflammosome and auto-inflammatory diseases. The systemic effects of inflammation.

Chronic inflammation.

The healing process. Resolution, regeneration, repair. Fibrosis. Sclerosis. New therapeutic strategies of the inflammatory process.

ONCOLOGY

Cancer as a multi-factorial and multi-step disease.

Ethiology of cancer: exogenous factors (chemical, physical, infectious agents): endogenous factors (genetic, epigenetic, hormonal).

Molecular pathogenesis of tumors: proto-oncogenes (mechanisms of activation and downstream effects). Tumor suppressor genes (functions and mechanisms of inactivation).

The cancer cell: alterations of the replicative potential and programmed cell death mechanisms. Tumor angiogenesis

Tumor metabolism Invasion and metastasis

Clinical applications: molecular diagnostics Precision oncology: concepts and relevant examples

MEDICINA INTERNA- INTERNAL MEDICINE

Approach to a patient History Taking

Head-to-toe assessment (adult and older adult) General survey and vital signs Skin

Head, eyes and ears Nose, mouth and neck Thorax and lungs Cardiovascular system Peripheral vascular system Breasts and axillae Abdomen

Musculoskeletal system

Nervous system (cranial nerves, motor system, sensory system, reflexes) Principles of radiation protection

Fundamentals of the various radiological techniques:

- X-ray
- Ultrasound
- Computed Tomography
- Magnetic Resonance Imaging
- Interventional Radiology

FARMACOLOGIA - PHARMACOLOGY

Pharmacokinetics - Passing of drugs across biological membranes. Routes of drug administration, absorption, distribution, elimination (excretion, metabolism). Quantitative pharmacokinetics: orders and kinetic constants, compartmental models, pharmacokinetic parameters (bioavailability, apparent volume of distribution, half-life, clearance), steady state principle. Dosage rhythms.

Pharmacodynamics - Definition of drug and pharmacological action, dose-effect relationship, relationship between drugs and their receptors (agonists, antagonists and inverse agonists), actions on biological receptors located on the plasma membrane, on intracellular receptors, on transporters, on ion channels, on enzymes, on nucleic acids, non-receptor-mediated actions. Quantitative analysis of drug-receptor interaction. Toxicity of drugs: mechanism-dependent and idiosyncratic adverse reactions. Clinical trial on drugs.

Chemotherapy drugs. General principles of chemotherapy. Antibacterial drugs.