

**2018 Entrance Exam Guidelines
Professional Degree Program
School of Public Health
(Professional Graduate School)
Graduate School of Medicine,
the University of Tokyo**

Graduate School of Medicine, the University of Tokyo

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Entrance Exam Guidelines

Professional Degree Program,

School of Public Health (Professional Graduate School)

Graduate School of Medicine, the University of Tokyo

The School of Public Health aims to produce highly-advanced professionals capable of performing leadership and practical roles in the field of public health in order to maintain, promote and restore health as well as to enhance the quality of life of a broad range of people including patients, local residents, and the nation.

The School of Public Health's quota for 2018 is 30 students, consisting of 20 students in the 2-year course and 10 students in the 1-year course (standard program duration of 1 year).

1. Outline

Japan is currently facing a number of urgent modern social issues, such as a rapidly declining birthrate, aging population, decentralization of authority, the emergence & reemergence of infectious diseases, the threat of bioterrorism, increased rates of suicide and death from overwork, medical malpractice, and deteriorating healthcare management.

The School of Public Health delivers education with the aim of producing highly-advanced professionals equipped with techniques for analyzing the health of human populations, a systematic understanding of social healthcare systems, and a public health-oriented mindset with excellent policymaking and management capabilities.

The curriculum consists of Epidemiology, Biostatistics, Clinical Epidemiology, Health Economics, Health Communication, Mental Health, Health Sociology, Social Gerontology, Biomedical Ethics, Human Resource Development for Health, Health Policy, Healthcare Informatics, Forensic Medicine/ Medical Law, Medical Safety Management, Health Risk Management, Environmental Health, and Theory and Practice of Occupational Health. Students can obtain a (professional) master's degree in public health by taking 30 or more units of both compulsory and elective subjects from this curriculum.

Upon completion, it is envisaged that students will find work as public health physicians in the field of healthcare administration/ health management within the public or private sectors; clinical epidemiology/ healthcare economics analysts engaged in EBM and clinical testing; healthcare analysts/ coordinators involved in healthcare quality analysis or advocacy; and healthcare information/ clinical engineering system administrators at healthcare facilities or health insurance organizations.

2. Practical experience requirements for the 1-year course

Prospective students must satisfy the Professional Degree Program eligibility criteria and possess the following practical experience.

| Eligibility criteria | Years of practical experience | Applicable practical experience |
|---|--|--|
| 4-year university graduate | 3 years or more | Practical healthcare experience at: healthcare-related administrative agencies; insurers such as health unions; healthcare facilities such as hospitals and clinics; aged care facilities; pharmaceutical industry; healthcare industry; other healthcare organizations (NPOs/ NGOs) |
| 6-year university graduate (medicine/dentistry/veterinary medicine) or master's course graduate | 2 years or more (includes physician & other clinical training) | |

Points to note:

- (1) Applicants must submit their certificate of employment as proof of the term of their employment.
- (2) Applicants who wish to maintain their employment at a government office, school, hospital, or private company during enrollment are required to submit a consent form (format optional) from their employer when completing the admission procedures according to 5(3) above, to the effect that they will remain committed to their studies while enrolled.
- (3) Examples of practical healthcare experience include: qualified physicians, dentists, veterinarians, pharmacists, or public health nurses employed by an administrative or healthcare organization for at least 32 hours/week, although other types of experience may also be admitted. To confirm whether your practical experience qualifies before submitting an application, please submit the following documents to the Graduate Student Affairs Section to arrive by Monday, 5 June: A) Curriculum Vitae (be sure to include your current contact details); B) Certificate of employment. Upon confirmation of the submitted documents, prospective applicants will be directly notified of the results in advance of the application period.

3. Entrance exam schedule

| | Date | Remarks |
|--|------------------------------------|--|
| Distribution of application forms | Mon, 8 May - Fri, 7 July 2017 | |
| Receipt of application forms (postal mail only) | Thu, 29 June - Fri, 7 July 2017 | The envelope must be postmarked no later than Fri, 7 July 2017, and must arrive no later than Tue, 11 July 2017. |
| Entrance exam (written exam) | Mon, 21 August 2017 | Details of exam schedules and venues will be provided by postal mail in the 'Examinee Guidelines'. |
| Announcement of written exam results | 7:00 p.m. Wed, 23 August 2017 | A list of successful written examinees will be posted on the notice board in front of the Faculty of Medicine Main Building (<i>Igakubu Honkan</i>). |
| Entrance exam (oral exam) | Thu, 24 August 2017 | The oral exam will only be taken by those who pass the written exam. |
| Announcement of results | Thu, 7 September 2017 | A list of successful applicants will be posted on the notice board in front of the Faculty of Medicine Main Building (<i>Igakubu Honkan</i>). |

Points to note:

- (1) To obtain a copy of the Admissions Guide in person, visit the Graduate Student Affairs Section located on the first floor of the Igakubu Honkan (Faculty of Medicine Main Building) between 9:00 a.m. and 5:00 p.m. on weekdays. To obtain a copy by post, send a self-addressed no. 2 rectangular (240x332mm) envelope with ¥250 of stamps affixed (plus ¥280 for express delivery) and '公共健康医学専攻募集要項請求' (School of Public Health Admissions Guide Request) written in red ink on the front of the envelope.

* Address for postal mail requests:

Graduate Student Affairs Section, Faculty of Medicine, the University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033

- (2) Applications arriving after the application period will not be accepted under any circumstances so be sure to obtain a copy of the Admissions Guide to allow ample time.

4. Entrance exam subjects

| Exam subject | Content | Remarks |
|---------------------|--|--|
| Foreign Language | English (4 questions) | Dictionaries not permitted. |
| Specialized Subject | ① General health sciences/social medicine | Basic questions about health sciences & social medicine (40 multiple choice questions) |
| | ② General Statistics | Basic questions about Statistics (20 multiple choice questions) |
| | ③ Choose 4 out of the following specialized fields: - Epidemiology - Medical statistics - Preventive medicine - Health education - Mental health - Medical ethics - Medical law - Public health survey methodology - Biomedical Informatics | All essay questions. Preventive medicine includes health management. |
| Short essay | Write an essay on a public health issue and measures to deal with it based on your practical experience. | Essay will be used in the oral exam. |

Points to note:

- (1) Details of the entrance exam schedule and venue will be provided in the 'Examinee Guidelines' posted with the Exam Card after submission of applications.

5. Individual eligibility review requirement

- * Only those intending to apply based on eligibility criterion (10) who have not graduated from university and who wish to take the entrance exam must undergo the individual eligibility review.

(1) Documents for submission

| Document | Summary |
|---------------------------------|--|
| Curriculum Vitae | Use a commercially-available CV form. |
| Academic background | Provide details of your academic background from high school onwards (format optional; use A4 paper) |
| Alma mater | - Provide documents containing the following details (student handbook etc.) - Entrance requirements - Class content & hours required for graduation/completion - Grades/assessment criteria etc. - Academic transcript & graduation certificate |
| Employment/ research history | Provide details of your employment & research history such as work duties, research papers etc. (format optional; use A4 paper) |

| | |
|----------------------|---|
| Research papers etc. | Submit a copy of academic journals containing research papers where you are the first author. |
|----------------------|---|

(2) Submission period

No later than Mon, 5 June 2017.

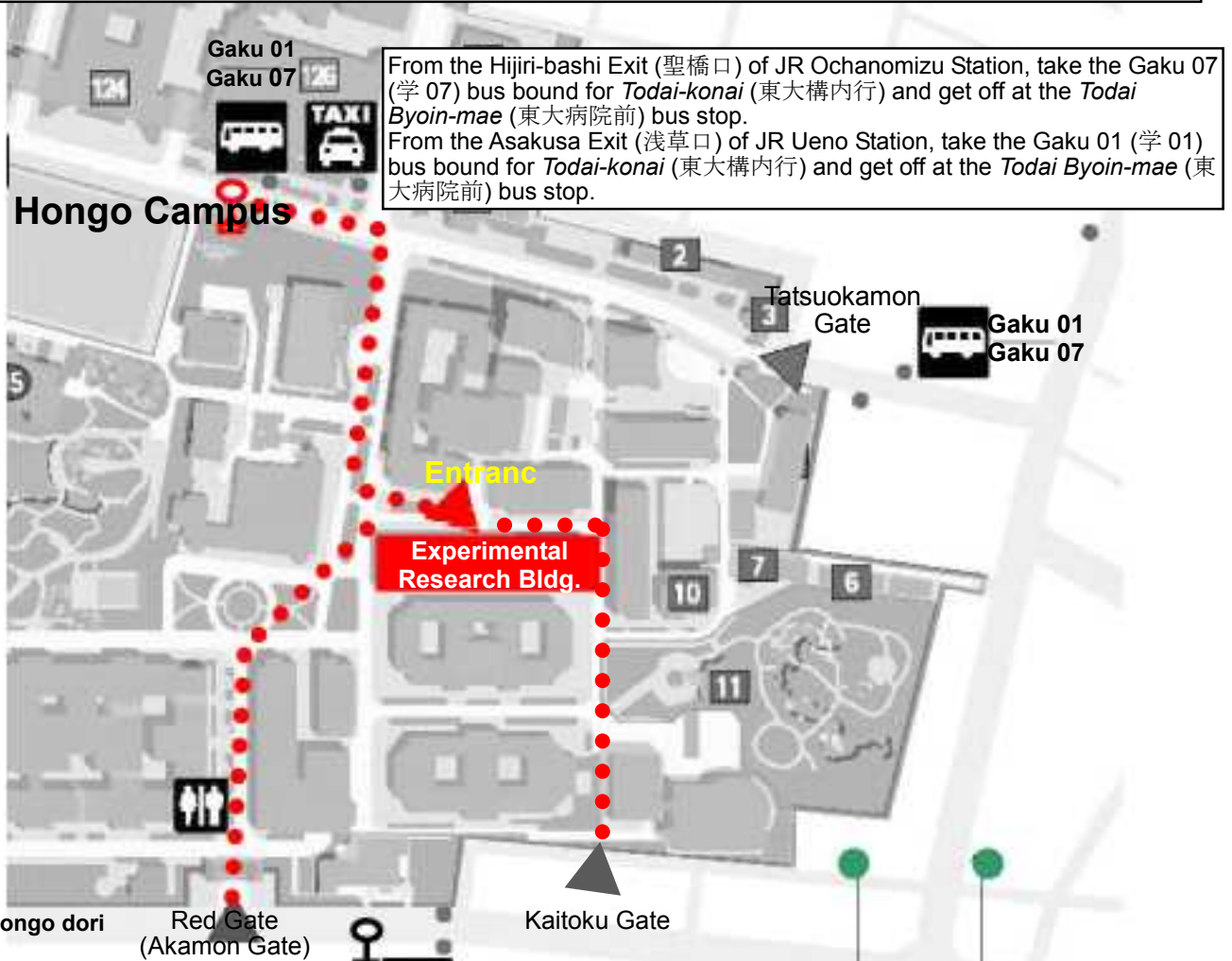
(3) Points to note

- A review of the prospective applicant (research content, research papers etc.) and his/her attended educational institutions (i.e. almae matres) will be conducted based on the submitted documents, and those who are deemed by the Graduate School of Medicine on the basis of this review to have academic ability equivalent or superior to that of a university graduate shall be permitted to take the entrance exam upon application.
- Those who are deemed eligible to apply for admission on the basis of the individual eligibility review must then complete the application procedures between Mon, 4 July and Fri, 8 July 2017 (inclusive).

The School of Public Health will provide guidance for prospective students as follows:

Date: **3:00 - 5:30 p.m. Saturday, 21 May 2017**

Venue: *Tetsumon Kinen Kodo*, 14F Faculty of Medicine Experimental Research Bldg. (*Igakubu Kyoiku Kenkyuran*), the University of Tokyo (see map below)



From the Hijiri-bashi Exit (聖橋口) of JR Ochanomizu Station, take the Gaku 07 (学 07) bus bound for *Todai-konai* (東大構内行) and get off at the *Todai Byoin-mae* (東大病院前) bus stop.
From the Asakusa Exit (浅草口) of JR Ueno Station, take the Gaku 01 (学 01) bus bound for *Todai-konai* (東大構内行) and get off at the *Todai Byoin-mae* (東大病院前) bus stop.

Toei Bus (都バス): from JR Ochanomizu Station, take the Cha-51 (茶 51) route bus bound for Komagome Station (駒込駅) or Oji Station (王子駅), or take the Higashi-43 (東 43) route bus bound for Arakawa Dote (荒川土手行) and get off at the Akamonmae (赤門前) bus stop.

Cha 51 Higashi 43

Oedo Line Hongo-Sanchome Station (E08)

Marunouchi Line Hongo Sanchome Station (M21)

Police ⊗

● Marunouchi Line: about 10 mins. walk from Hongo Sanchome Station
● Oedo Line: about 10 mins. walk from Hongo Sanchome Station

Outline of the curriculum

| Subject | Description | Credits |
|---|--|---------|
| Epidemiology Research & Practice | In addition to lectures on basic epidemiological research methodologies, students learn through case studies of the problems which arise when putting these methodologies into practice, as well as ways to overcome them. The core themes of this subject are: epidemiological thought; demonstrating causative relationships; understanding disease onset and ensuring reliability; introduction to epidemiological research design; bias and error variance; controlling bias, particularly confounding; role of statistical analysis; research ethics & consent/protection of privacy; genetic epidemiology; research outcome feedback; and preventive medicine etc. | 2 |
| Preventive Health Practice & Assessment | Students learn primarily through case studies about practical initiatives linked to occupational & community preventive health based on member feedback of medical checkup results and epidemiology research outcomes. The core themes of this subject are: setting and evaluation of health objectives; development of implementing organizations & allocation of roles/costs; obtaining member consent & information feedback/communication; privacy & protection of personal information; occupational health initiative case studies (role of occupational health physicians); community health initiative case studies (role of public health nurses) etc. | 2 |
| Statistical Analysis of Medical Data | By learning about medical research design, statistical hypothesis testing & confidence intervals, sample size design, contingency table data analysis, regression & correlation, stratified analysis, model-based analysis, survival analysis, and multivariate analysis techniques, students acquire the basic knowledge and practical abilities required for statistical analysis of medical data. | 2 |
| Medical Statistics Exercise | Students learn about the main statistical methods covered in 'Statistical Analysis of Medical Data' using actual cases with SAS/S (or R) statistical software. Students also create hypothetical medical research (epidemiology or clinical study research) and formulate a statistical analysis plan through a group exercise, then improve their understanding of the results through debate. | 2 |
| Medical Research Design | This subject comprises lectures on epidemiological research & clinical trial design and actual research management, as well as case studies. The aim is to equip students with the basic knowledge required to understand studies published in key journals, and to hone their protocol drafting skills as well as the ability to participate in a research office through teamwork. The core themes of this subject are: research design types & characteristics; standardization of measurements; epidemiological research design (bias control & sample size determination etc.); clinical trial methodology (randomization & assignment, endpoint determination, interim analysis, statistical analysis principles, sample size determination, ICH guidelines etc.); introduction to sample surveys; protocol preparation; quality control & quality assurance; data management; drafting of academic papers & CONSORT statements; research cost estimation and research management etc. | 2 |
| Clinical Epidemiology | Subjects of clinical epidemiological studies exist in clinical practice. Researchers must find out research questions in clinical practice, make a study hypothesis and an appropriate study design, make statistical analyses with available data and make clinically valid interpretation of the results. The course provides theories and practical skills of clinical epidemiology that are essential for implementing clinical studies. | 2 |
| Clinical Epidemiology Exercise | The course provides hands-on training to help students write their research protocols for fund application through lectures and tutorials. The course also provides how to write medical literature. | 2 |
| Healthcare Economics | The course provides basic knowledge about health economics and basic methods for health economic analyses. Through lectures and group debates, students learn how to apply theories of health economics to actual health policy issues. | 2 |

| Subject | Description | Credits |
|---|---|---------|
| Health Communication | The course overviews major areas and topics of health communication including interpersonal communication in healthcare settings to media communication, and introduces current research, practice and education in health communication. Students learn basic theories and methodologies as well as methods of analysis and evaluation in health communication. | 2 |
| Seminar in Health Communication | Students practice skills for health communication to learn practical applications of the theories and methodologies introduced in Health Communication lecture, and to learn how to make effective health communication in various health settings including healthcare institutions, government, academic and educational institutions, patient organizations, and mass media. | 1 |
| Seminar in Healthcare Technology Assessment | This three-day intensive seminar will provide hands-on training to conduct health technology assessment, e.g. measurement of direct and indirect cost, benefit as is expressed in quality adjusted life years and utility, and modeling decision trees, and calculating incremental cost-effectiveness ratio with sensitivity analysis. | 1 |
| Seminar in Healthcare Organization Management | The course is composed of lectures on accounting, human resource management, risk control, and strategic building, complemented by case method using a case scenario of actual hospital management. Students with clinical experience >3 years will be accepted. | 2 |
| Introduction to Clinical Medicine | The course will provide lectures on basic knowledge about clinical medicine including anatomy, physiology, diagnosis and treatment. | 1 |
| Medical research and CDISC standards | The course provides the overview of CDISC (Clinical Data Interchange Consortium) Standards, which are determined be obligatory to regulatory new drug submission in Japan, U.S.A, and EU, and will be widely used for medical research data collection, exchange, archiving, etc. in medical research in general besides regulatory clinical research around the world. | 1 |
| Mental Health I | The half of the course provides epidemiology of mental disorders in Japan and other countries, methodology to assess mental health, and current evidence for primary, secondary & tertiary prevention of mental disorders in the community, including workplace and schools. The latter half of the course provides a series of interactive lectures on implementation of available evidence in improving mental health based on practical cases, followed by a group work to develop a new mental health program. | 2 |
| Mental Health II | Students learn about occupational mental health, its history & present status, relevant legislation, guidelines & systems; basic theory of occupational stress; evidence-based effective primary, secondary & tertiary prevention methods, planning, and program evaluation methods. After examining case studies on mental health policy planning based on workplace characteristics, students engage in debate on specific ways to promote said policies. | 2 |
| Health Education | This first half of the course provides theoretical basis for understanding health-related behaviors and designing health educational intervention programs at micro and macro levels. Through in-class discussion, students will critically read a presumed view of human and society, strength, and limitations of each theory. The latter half of the course applies theories to real settings in workplace, community, healthcare settings, and school. | 2 |
| Health Sociology | The course provides a showcase of sociological theories of health and medicine, to encourage students to critically consider roles and meanings of health, illness, and medical/public health activities in societal context. | 2 |
| Health Promotion Science | In this subject, students learn and develop analytical and evaluation skills by collecting social and physical information on community and work-site health issues and by examining case studies. Students subsequently develop the skills to plan effective programs addressing health issues in small-group debates. Specific areas covered include: planning, implementation and evaluation of health promotion programs for life-style related disease and behavioral modification; basic theory of behavioral science; individual and population approaches; and various models used to create supportive environments. | 2 |
| Biomedical Ethics I | Students consider ethical & philosophical approaches which form the basis of ethical judgments in public health policymaking as well as clinical practice. Areas covered include: introduction to biomedical ethics & history; political philosophy; allocation of medical resources; and informed consent. These topics are addressed in lectures and small-group debates. | 2 |
| Biomedical Ethics II | This subject expands upon the topics covered in 'Biomedical Ethics I'. Students read and interpret important literature in the fields of law & morality, rights theory, confidentiality, medical futility, and meta-ethics. | 2 |

| Subject | Description | Credits |
|---|---|---------|
| Society and Health I | This lecture series provides a broader context of social determinants of health (SDH) including education, poverty, social isolation, living arrangements, social networks, income inequality, and social capital. Currently available theoretical and empirical evidence on SDH will be reviewed and its strengths and challenges will be discussed. | 2 |
| Society and Health II | This course expands the discussions in Society and Health I to more practical and political contexts. Course activities include case-oriented discussions, students' group-based presentations on 5 topics on health equity issues and a health impact assessment workshop. | 2 |
| Theory and practice of occupational health | This class provides updated information of recent trends and global perspectives in occupational health. Also students learn basis of practical skills to pursue occupational health activities at workplace, through case studies and exercises. | 2 |
| Human Resource Development for Health | Participants will be able to learn human resource development for health (health professional education) based on principles related with education and learning through plenary and small group discussion. | 2 |
| Assessment in Health Professional Education | In human resource development for health areas, participants will be able to learn learner assessment, which is closely related with licensing and mastery of learning contents, including principles of statistics and psychometrics. | 2 |
| Health Policy | Using several cases related to healthcare policymaking & management, such as prevention and health promotion, access to healthcare, health insurance reimbursement systems, and health policy-making process, this subject provides students with a systematic understanding of various stakeholder perspectives, relevant social systems, funds procurement, and their management. | 2 |
| Healthcare Informatics | This subject consists of lectures on healthcare data management, data coding & classification, information technology basics & standardization, data processing techniques, healthcare information system & network technology basics and operation, healthcare information protection & security, and healthcare information system management etc. | 2 |
| Healthcare Informatics Exercise | The exercise covers practical healthcare data management & data coding techniques, data processing techniques, and healthcare information system design & management techniques, based on actual hospital information systems. | 1 |
| Public health informatics | Students learn the basics of public health informatics. To that end, the subject focuses on geographical information system, infection surveillance system and disease registration system associated information processing techniques. | 2 |
| Public health informatics Exercise | In this exercise, students learn about practical public health information engineering through case studies on geographical information system using R. | 1 |

| Subject | Description | Credits |
|--|---|---------|
| Forensic Medicine & Medical Law | This subject comprises lectures and debates focusing on the legal & social contexts of abnormal fatalities, particularly cases/precedents of death related to medical care. In addition to participating in an actual autopsy, postmortem examination & evaluation, students visit the law courts and engage in debates. | 2 |
| Forensic Medicine & Medical Law Exercise | In this exercise, students analyze the issues relating to coroner's inquest methods & systems in Japan and overseas through surveys of the deceased's relatives and physicians, literature searches, and fieldwork etc., and propose new methods and systems. The exercise also leverages the lecturer's practical experience on the Ministry of Health Labour & Welfare's 'Model Project on Inquests into Medical Care-related Deaths' with a role play assuming the roles of inquest personnel (nurses, physicians & coordinators) and education supervisors. | 2 |
| Medical Safety Management | In this subject, students become acquainted with actual medical safety management by investigating risk factors related to potential incidents & medical accidents in clinical practice, and engaging in practical debates on the development of systems for the promotion of medical safety as well as responses to medical accidents and past medical malpractice suits. | 1 |
| Medical Safety Management Exercise | Students acquire practical analytical & policy planning skills by gathering & analyzing materials from actual healthcare facilities relating to potential incidents in clinical practice, development of systems for the promotion of medical safety, and responses to medical accidents. | 0.5 |

| | | |
|---|--|---|
| Public Health Preparedness | This subject teaches students the basics of responding to health risk outbreaks through case studies of typical past cases on: field epidemiological survey methods to deal with health risks such as a new type of influenza, SARS, and bioterrorism; public health surveillance; identification of the causes of disease outbreaks; and planning, implementation & assessment of countermeasures. | 1 |
| Health Administration & Public Health Preparedness Exercise | In this exercise, students learn planning, implementation and evaluation of actual countermeasures against various diseases, organizational and preparedness management in public health practice, and the roles of the public health officers, by visiting actual health administration environments. | 2 |
| Environmental Health | Humans ingest various toxic substances from the environment including air, water, and food. This subject provides students with basic knowledge and concepts relating to identification of the biological effects of these hazardous substances, dose-response relationships, the pathological mechanisms by which harmful effects are manifested and biomarkers for initial diagnosis of their effects, and environmental defense measures. | 1 |
| Advanced Public Health Theory | This subject enables students to better understand the nature of health science contributing to public welfare, as well as the accompanying research & practical issues which need to be overcome, by addressing specific approaches and challenges from each of the School of Public Health's 13 research fields which constitute a contact point between public policy & activity. | 2 |
| Internship | Students attend public health facilities (public health research & testing facilities, think tanks, NPOs, healthcare facilities etc.) and leverage their subsequent practical experiences to develop skills in identifying personal initiatives, conducting analysis, and planning measures/policies. | 2 |
| Themed Research | Under the guidance of their research supervisor, students acquire advanced problem-solving capabilities through practical tasks such as fieldwork, data collection, analysis, statistical analysis and essay writing on a particular research theme. | 6 |

How to Purchase Previous Graduate School of Medicine Exams

Previous entrance exam questions for the Graduate School of Medicine can be obtained from the Tokyo Society of Medical Sciences (TSMS).

I. List, type, and cost of previous exam questions

II. How to purchase

① To purchase directly from TSMS: see TSMS map and business hours below.

② For delivery by postal mail: see 'How to fill out the Payment Transfer Form' below.

I. List of previous exam questions

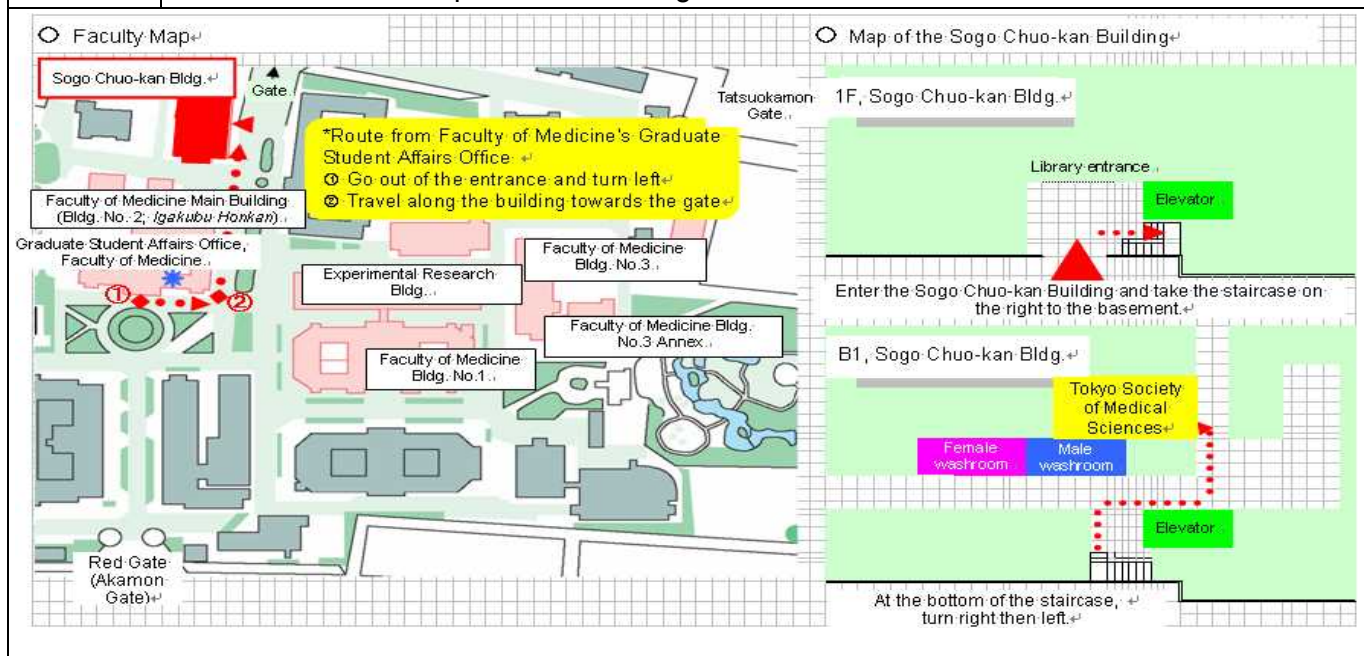
Graduate School of Medicine List of previous exam questions (no minimum purchase volume)

| Program/ Course | Year of Admission | Price |
|---|-------------------|--------------|
| Doctor of Medicine | 2010 – 2017 | ¥1,000/ year |
| Doctor of Health Sciences & Nursing (Exam. in Feb.) | 2009 – 2016 | ¥300/ year |
| Doctor of Health Sciences & Nursing (Exam. in Aug.) | 2010 – 2014 | ¥300/ year |
| Master of Medical Science | 2010 – 2017 | ¥300/ year |
| Master of Health Sciences & Nursing | 2017 – 2017 | ¥1,000/ year |
| Master of International Health | 2010 – 2017 | ¥400/ year |
| Master of Health Sciences & Nursing (Public Health Nursing Course & Nursing Course) | 2010 – 2017 | ¥300/ year |
| School of Public Health (SPH; professional degree course) | 2010 – 2017 | ¥1,000/ year |

II. How to purchase

① To purchase directly from TSMS:

| | |
|----------------|--|
| Distributor | <p>Tokyo Society of Medical Sciences: B1, Igakubu Sogo Chuo-kan, Faculty of Medicine, the University of Tokyo (see map below)</p> <p>Tel: 03-5841-3681 Fax: 03-3816-3287 Email: igakukai@m.u-tokyo.ac.jp</p> <p>Website: http://square.umin.ac.jp/igakukai/02toppage/toppage.html</p> |
| Business hours | <p>10:00 a.m. - 12:00 p.m. and 12:30 p.m. - 5:00 p.m. on weekdays (except when the library is closed)</p> <p>* The office may be closed on Saturdays, Sundays and Holidays.</p> <p>Please confirm it is open before visiting.</p> |



School of Public Health, Graduate School of Medicine, the University of Tokyo

Website: <http://www.m.u-tokyo.ac.jp/sph/>

For queries about the entrance exam, contact the Faculty of Medicine's Graduate Student Affairs Section on 03-5841-3309 between 9:00 a.m. - 5:00 p.m. on weekdays.

May 2017