

**Graduate School of
Environmental Science,
Hokkaido University**

Master's Course

Admission in April 2011

Examination in March 2011

Student Application Guidebook

December 2010

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Goals of Education

The goals of education in Graduate School of Environmental Science are, on the basis of natural science, to promote education and research for tracking environmental processes and solving global environmental issues, and to foster researchers and professionals who cope with these issues.

Admission Policy

Graduate School of Environmental Science admits students with strong academic backgrounds in science and motivation for studying various areas of environmental sciences.

1. Admission Capacity

Master's Course		
Division	Enrollment	Acceptance in this exam.
Division of Environmental Science Development	44	About 20
Division of Earth System Science	35	About 10
Division of Biosphere Science	52	About 10
Division of Environmental Materials Science	28	About 5
Total	159	

2. General Requirements for Application

Applicants must be as one of the followings:

- (1) Individuals who are university graduates, or expecting graduation by March of 2011.
- (2) Individuals who have attained or have prospects of attaining a Bachelor's degree from the National Institute for Academic Degrees and University Evaluation in Japan by March 2011.
- (3) Individuals selected by the Ministry of Education, Culture, Sports, Science and Technology.
- (4) Individuals who have finished (or will finish) 16-year-education by March 2011, and have attained or have prospects of attaining a Bachelor or an equivalent degree by March 2011 in foreign countries.
- (5) Individuals who finished 16-year-education, and got a Bachelor or an equivalent degree in a corresponding course provided by a foreign educational system or college in Japan.
- (6) Individuals who have completed education in at least three years at a university in Japan and individuals who have completed the 15-year education in foreign countries or a corresponding course in Japan. And who are approved to be eligible by this graduate school.
- (7) Individuals who are 22-year-old or more by March 31, 2011 ; are considered to be academically equivalent to a university graduate (for example, college graduates, junior college graduates or professional/ vocational school graduates that do not have a Bachelor's degree). And who are approved to be eligible by this graduate school.

Notes

Those individuals who apply to category (6) or (7) must submit the designated application form for the preliminary review of application qualification by January 4, 2011. Those who wish to receive a set of application forms for the preliminary review of application qualification by mail should send a return envelope with the category number, applicants name and address written on its front and postal stamps (equivalent to ¥ 120 for ordinary mail or ¥ 390 for express mail) pasted on it.

Required documents for the preliminary review of application qualification for category (6)

- (i) Designated application form for the preliminary review of application qualification (Prescribed Form a).
- (ii) Curriculum vitae (Prescribed Form b).
- (iii) List of publications (Prescribed Form c).
- (iv) Copy of a diploma from one's last school.
- (v) Academic transcript issued by the president or dean of the university.
- (vi) A certificate or a recommendation letter from the authority of the workplace stating of the duration of the applicant's research career.
- (vii) An essay including reason of application and research plan (A4, 1 sheet)
- (viii) A return envelope (for notification of exam result) with applicant's name and address written on its front and postal stamps equivalent to ¥ 350 pasted on it.

Required documents for the preliminary review of application qualification for category (7)

- (i) Designated Application form for the preliminary review of application qualification (Pre scribed Form a)
- (ii) Curriculum vitae (Prescribed Form b)
- (iii) List of publications (Prescribed Form c)
- (iv) Copy of a diploma from the highest school graduated.
- (v) An essay including (1) study or research career, research outline or job outline, (2) reason of application and (3) research plan (A4, 2 sheets)
- (vi) A return envelope (for notification of exam result) with applicant's name and address written on its front and postal stamps equivalent to ¥ 350 pasted on it.

For further information please contact us personally.

3. Application Period

January 11 (Tue) to January 21 (Fri) 2011. 9:00a.m. to 5:00p.m. Daily, excluding Saturday and Sunday.

4. Required Documents

Provide the following to the department.

Application Forms	Remarks
(1) Application Form, Resume, Admission Card for Examination.	The office provides all forms. Designated form must be used.
(2) Identification Photo	A piece of photo taken within 3 months prior to application (5cm × 4cm) Write your name and preferred division on the back of the photo.
(3) Academic Transcript	A paper should be issued within 3 months prior to application.
(4) Graduation Certificate	A certificate of graduation from one's last school issued within 3 months prior to application.
(5) Return Envelope (for Admission Card for Examination (1))	Write name and address on the envelope provided by the office. Paste postal stamps equivalent to ¥ 710.
(6) Return Envelope (For Pass/Fail Notification)	Write name and address on the envelope provided by the office.
(7) Screening Fee	¥30,000 (Use the enclosed transfer form, after consulting with a supervisor candidate or Academic Affairs Office of the graduate school. The screening fee is non-refundable)
(8) Essay	An essay must be submitted with an application form in the case when it is required for Division of Environmental Materials Science.
(9) Score sheet of TOEFL (only applied to Division of Environmental Science Development, as well as Division of Earth System Science, Course in Geochemistry.)	Those who have obtained above the specified TOEFL scores (See Schedule Form on page 6) will be able to include copies of the TOEFL Score Record in the application. In this case, ask ETS to send the Official Score Report directly to our graduate school. Our Code Number is 8744 (Those who obtain the score sheets after the application period are required to contact Academic Affairs Office before the examination.)
(10) Certificate of Alien Registration or Copy of Passport (only for those applied)	1) Foreigner who lives in Japan should submit a certificate of alien registration. 2) Foreigner who lives outside of Japan should submit a copy of the passport.

As for following required documents or matters (described on page 3), please consult with your supervisor candidate.

- (1) Application Form
- (5) Return Envelope (for Admission Card for Examination)
- (6) Return Envelope (For Pass/ Fail Notification)
- (7) Screening Fee

5. Selection

Successful candidates are selected after evaluation of academic skills, and other requirements.

6. Examination

Date	Subject Matter	Time	Remarks
March 1 (Tue)	Foreign Language	10:00 - 12:00	English examination Only for foreign students, either Japanese or English is selected. (See Schedule Form on page 6 for information on TOEFL score.)
	Specialized Subjects	13:00 - 16:00	Subjects provided by the Division (Listed in Schedule Form on page 6).
March 2 (Wed)	Oral Exam		The time and location will be informed on the first day.

7. Place of Examination

Graduate School of Environmental Science, Hokkaido University
Kita 10- Nishi 5, Kita-ku, Sapporo
(Further details provided with return of admission tickets for examination)

8. Announcement of Admission

March 7 (Mon) 2011, 3:00p.m.

The list of accepted candidates will be notified on the bulletin board in the lobby of the Graduate School of Environmental Science.

The examination result will be also sent to each applicant by mail.

9. Admission of Working Adults

Because the Master's degree program for working adults may differ among divisions or courses, applicants should consult Academic Affairs Office of the graduate school prior to application.

10. Admission Procedures

- (1) Those who are admitted to this graduate school will be informed of the procedures enclosed with the examination result.
- (2) Admission and tuition fees
 - ① Admission fee ¥282,000
 - ② Annual tuition ¥535,800(The tuition must be paid by single payment or semiannual payment.)
These fees might be changed.

11. Completion in a Period Longer than the Ordinary Period

Those who have a job or the other commitments may apply for the completion in a period longer than the ordinary period (2 years), and then, the application will be reviewed carefully. The completion period is not longer than 4 years. Please consult a supervisor candidate.

12. Other Information

- (1) Application guidebook in Japanese is also available.
- (2) Applicants in Japan who wish to receive a set of application forms by mail should send a return envelope with the applicants name and address written on its front and postal stamps equivalent to ¥ 390 pasted on it.
- (3) The applicants submitting documents by postal mail, should send them by the registered special delivery mail with a note "Application form for admission to Doctor's Course" written in red on the envelope.
- (4) Once the applicants have submitted the documents, they cannot change the contents.
- (5) Please contact Academic Affairs Office (see below) for more detailed information.
- (6) Personal information protection policy
Hokkaido University uses the applicants' personal information for selection, announcement of admission and admission process to the graduate school. Names and addresses may be used for the correspondence from Hokkaido University Frontier Foundation and allied organizations of the university, (i) Hokkaido University Athletic Union and (ii) the Clark Memorial Foundation at Hokkaido University.

Address to Submit the Application

Academic Affairs Office (*Gakujutsu Josei Tantou*)
Graduate School of Environmental Science
Hokkaido University
Kita 10-Nishi 5, Kita-ku, Sapporo, 060-0810 Japan
E-mail : gakujutu@ees.hokudai.ac.jp

Schedule Form of Foreign Language

Division	Course	Foreign Language (TOEFL Score Sheet)
Division of Environmental Science Development	All courses	Those who have obtained the TOEFL-PBT (470 or more points), or the TOEFL-iBT (52 or more points) within 2 years before the examination date are exempt from the English examination. The TOEFL score is converted to the examination point according to our conversion formula. When the English examination is taken and the TOEFL score sheet is submitted, the higher score will be used for the judgment of the admission.(See Required Documents on page 3.)
Division of Earth System Science	Course in Geochemistry	TOEFL is not applied on page 3.
	Course in Atmosphere-Ocean and Climate Dynamics	
	Course in Cryosphere Science	
Division of Biosphere Science	All courses	TOEFL is not applied
Division of Environmental Materials Science	All courses	TOEFL is not applied

Schedule Form of Specialized Subjects

Division	Course	Specialized Subjects
Division of Environmental Science Development	All courses	<p>Choose (a), (b) or (c). Refer to the attached documents in detail.</p> <p>(a) Required questions: Essay on environmental science and issue. (Notice: Complete and submit this essay in the first 60 minutes of the exam of specialized subjects .)</p> <p>Selective questions: Select and answer any two questions out of the twelve questions in the following subjects: Physics, Biology, Chemistry, Geoscience, Mathematics and Environmentology. (Notice: Two questions are given for each subject.)</p> <p>(b) Oral presentation only. Make a presentation on your research results in undergraduate education.</p> <p>(c) Essay on environmental science and issue. Answer an essay topic handed out separately and the other essay topic in the 3-hour exam of specialized subjects.</p>
Division of Earth System Science	Course in Geochemistry	<p>Essay on motivation to apply for this course, research interests, etc. (to be completed and submitted in 60 minutes).</p> <p>Examination. Choose two questions from the following six subjects. There will be more than 2 questions for each subject: Geochemistry (course related subject), Chemistry, Earth Science, Physics, Biology, and Mathematics.</p>
	Course in Atmosphere-Ocean and Climate Dynamics	Answer four questions on Mathematics and Physics.
	Course in Cryosphere Science	<p>Course in Cryosphere Science: *Choose (a) or (b) for the type of examination.</p> <p>(a) You are requested to answer two questions out of seven on the following subjects: Fundamental Physics (I and II), Meteorology, Oceanography, Hydrology, Quaternary Science, and Chemistry <u>on the day of examination.</u></p> <p>(b) You are requested to submit a written report about a relevant topic (given at the preliminary interview) along with application forms <u>by the deadline date of application.</u> This option will be</p>

permitted only for those who pass the preliminary interview.

*We strongly recommend that you should specify the name of your expecting supervisor.

* If you choose (a), you must write two subjects that you want to take at the examination (e.g., Physics I and Physics II; Meteorology and Chemistry; Oceanography and Quaternary Science) below the name of your expecting supervisor in the application form.

* If you choose (b), you must contact some of staff members of this course by 28 December of 2010. You will be informed of detailed schedule and procedure at that time.

Division of Biosphere Science	Course in Ecosystem Biology	1500-word essay on previous studies, proposed research activity and reason for application. Oral presentation (PC projector, OHP etc. available) on previous studies and oral examination at the time of specialized subject examination on the first day afternoon (no oral examination on the second day). The above essay should be sent together with the other required documents.
	Course in Ecological Genetics	
	Course in Molecular Biology	
	Course in Plant Ecology	
	Course in Animal Ecology	
	Course in Forest Conservation	
	Course in Marine Biogeochemistry and Physics	Answer questions on Biological Processes in Oceanography and Fisheries Science
	Course in Aquatic Biology	Answer questions on Aquatic Ecology, Bioresources in Aquatic Organisms, Developmental Biology in Aquatic Organisms and Cell Biology in Aquatic Organisms.
Course in Agro-Ecosystem Science	Answer a question on Environmental Science for earth, agriculture and human life and two questions of the following Agricultural fields, Crop Science, Plant Breeding (including Plant Biotechnology), Farm Management, Horticultural Science, Animal Breeding and Reproduction, Animal Feeding and Nutrition, and Grassland Science. The two fields that you choose should be submitted with application form.	
Division of Environmental Materials Science	All courses	Choose (a), (b) or both selections. Foreign applicants are required to contact a supervisor candidate in advance. (a) Applicant in Basic Chemistry Selection Answer all questions in general chemistry (two in physical chemistry and two in organic chemistry). (b) Applicant in Self-recommendation Selection Submit application forms with an essay including reason of application, scientific background, and research plan. Examination includes oral presentation and questions concerning to your previous research or research plan.

Academic Staff in Graduate School of Environmental Science, Hokkaido University
Master's Course

NO. 1

Division	Course	Academic Staffs	Division	Course	Academic Staffs	
Division of Environmental Science Development	Human and Ecological Systems	P TAKADA Takenori	Division of Earth System Science	Geochemistry	P KAWAMURA Kimitaka	
		P HIGASHI Seigo			P YOSHIKAWA Hisayuki	
		P HIRAKAWA Kazuomi			P SUGIMOTO Atsuko	
		P TSUYUZAKI Shiro			AP WATANABE Yutaka	
		P WATANABE Teiji			AP YAMAMOTO Masanobu	
		P HARA Toshihiko			AP SUZUKI Koji	
		AP FUJII Masahiko			AP NISHIOKA Jun	
		AP ISHIKAWA Mamoru			AP SEKI Osamu	
		AP SHIRAIWA Takayuki			AP YAMASHITA Yohei	
		AP TOYODA Kazuhiro			AP' IRINO Tomohisa	
		AP SATAKE Akiko			AP' MIYAZAKI Yuzo	
		AP' SATO Tomonori			AP' KAMEYAMA Sohiko	
		AP' NEGISHI Junjiro			Atmosphere-Ocean and Climate Dynamics	P KUBOKAWA Atsushi
		AP' SAWAGAKI Takanobu				P YAMAZAKI Koji
	Environmental Adaptation Science	P FUGETSU Bunshi		P EBUCHI Naoto		
		P TANAKA Shunitz		P HASEBE Fumio		
		AP NIIOKA Tadashi		P MITSUDERA Humio		
		AP TOYODA Kazuhiro		P OHSHIMA Keiichirou		
		AP OKINO Tatsufumi		P FUJIYOSHI Yasushi		
		AP' KURASAKI Masaaki		P WATANABE Tsutomu		
	Practical Science for Environment	P ONO Yugo		P YAMANAKA Yasuhiro		
		P YAMANAKA Yasuhiro		AP TANIMOTO Youichi		
		P SASA Kaichiro		AP FUJIWARA Masatomo		
		P MINAGAWA Masao		AP AOKI Shigeru		
		AP' NEGISHI Junjiro		AP HORINOUCHI Takeshi		
	Global Environmental Management	P MINAGAWA Masao		AP SHIRASAWA Kunio		
		P TANAKA Shunitz		L NAKAMURA Tomohiro		
		P TANAKA Noriyuki		AP' MIZUTA Genta		
		AP ISHIKAWA Mamoru		AP' FUKAMACHI Yasushi		
		AP FUJII Masahiko		AP' KAWASHIMA Masayuki		
				AP' SATO Tomonori		
		AP' TOYOTA Takenobu				
		Cryosphere Science		P FUJIYOSHI Yasushi		
	P WATANABE Tsutomu					
	P SATO Atsushi					
	P Ralf GREVE					
	P MITSUDERA Humio					
	AP SHIRASAWA Kunio					
	AP NAKAI Sento					
	AP ISHIKAWA Mamoru					
	AP SHIRAIWA Takayuki					
	AP AOKI Shigeru					
	L SUGIYAMA Shin					
	AP' ISHII Yoshiyuki					
	AP' KODAMA Yuji					
	AP' SONE Toshio					
	AP' MATOBA Sumito					
	AP' SHIMOYAMA Kou					
	AP' IIZUKA Yoshinori					
	AP' KAWASHIMA Masayuki					
	AP' TOYOTA Takenobu					

※ P=Professor, AP=Associate Professor, L=Lecturer, AP'=Assistant Professor

Academic Staff in Graduate School of Environmental Science, Hokkaido University
Master's Course

NO. 2

Division	Course	Academic Staffs	Division	Course	Academic Staffs	
Division of Biosphere Science	Ecosystem Biology	P TODA Masanori	Division of Environmental Materials Science	Biomaterials Chemistry	P SAKAIRI Nobuo	
		P HARA Toshihiko			P MATSUDA Fuyuhiko	
		P FUKUI Manabu			P TANAKA Shunitz	
		AP SUMIDA Akihiro			P FUGETSU Bunshi	
		AP KASAHARA Yasuhiro			AP YAMADA Koji	
		AP OCHIAI Masanori			AP OKINO Tatsufumi	
		AP' OHDACHI Satoshi			AP' UMEZAWA Taiki	
		AP' ONO Kiyomi			Environmental Nano-Materials	P NAKAMURA Hiroshi
		AP' KOJIMA Hisaya				P SHIMAZU Katsuaki
		AP' HASEGAWA Shigeaki				P KONISHI Katsuaki
	Ecological Genetics	P KIMURA Masahito		AP YOSHIDA Noboru		
		P OHARA Masashi		AP KAMIYA Yuichi		
		AP SUZUKI Hitoshi		AP TOYODA Kazuhiro		
		AP MIURA Toru		AP HIROKAWA Jun		
	Molecular Biology	P MORIKAWA Masaaki		AP KAWAGUCHI Toshikazu		
		AP OKUYAMA Hidetoshi		AP' NAKATA Kou		
		AP YAMAZAKI Ken-ichi		AP' SHICHIJU Yukatsu		
		AP' WASHIO Kenji		Molecular Photonics and Electronic Science	P OHTA Nobuhiro	
		AP' KURASAKI Masaaki			P NAKAMURA Takayoshi	
		AP' MIWA Kyoko			AP NAKABAYASHI Takakazu	
	Plant Ecology	P TAKADA Takenori			AP NORO Shin-ichiro	
		P KOHYAMA Takashi			AP' IIMORI Toshifumi	
		P TSUYUZAKI Shiro			AP' KUBO Kazuya	
		AP HARUKI Masahiro			Environmental Catalytic Chemistry	P OSAWA Masatoshi
		AP KUDO Gaku				P OHTANI Bunsho
		AP' KUBO Takuya				AP YE Shen
	AP' HIGASHI Seigo	AP ABE Ryu				
	Animal Ecology	AP NIIOKA Tadashi		AP' AMANO Fumiaki		
		AP NODA Takashi				
		AP' KOIZUMI Itsuro				
		Marine Biogeochemistry and Physics		P KISHI Michio		
	P MONTANI Shigeru					
	AP KUDO Isao					
	AP' UENO Hiromichi					
	Aquatic Biology	P UEDA Hiroshi				
		P MOTOMURA Taizo				
		P YAMAHA Etsuro				
		P NAKAOKA Masahiro				
		AP MUNEHARA Hiroyuki				
		AP MIYASHITA Kazushi				
		AP NAGASATO Chikako				
		AP' YOTSUKURA Norishige				
		AP' DENBOU Takashi				
		AP' YAMAMOTO Jun				
		AP' MITANI Youko				
		Forest Conservation		P SASA Kaichiro		
				P KANUMA Kinzaburo		
	P SATO Fuyuki					
	P HIURA Tsutomu					
	P SAITO Takashi					
AP UEMURA Shigeru						
AP KADOMATSU Masahiko						
AP CHA Joo Young						
AP AGETSUMA Naoki						
AP SHIBATA Hideaki						
AP YOSHIDA Toshiya						
AP' NOMURA Mutsumi						
AP' TAKAGI Kentaro						
AP' NAKAZI Tatsuro						
AP' KISHIDA Osamu						
AP' NAKAMURA Masahiro						
AP' FUKUZAWA Karibu						
Agro-Ecosystem Science	P ARAKI Hajime					
	P YAMADA Toshihiko					
	P HATA Hiroshi					
	AP' HIRATA Toshiyuki					
	AP' HOSHINO Yoichiro					

※ P=Professor, AP=Associate Professor,
L=Lecturer, AP'=Assistant Professor