Teaching Assistant Recruitment for General Education in 2nd Term of AY 2025

Graduate School of Life Sciences

Class		Introductory Science Experiments							
Semester		2nd semester							
Description of Duties		TAs in Introductory Science Experiments will help lead any of the 6 experiment topics. Students rely on TAs, so they occupy a very important position in carrying out classes. Consequently, they should carry out their duties in close cooperation with the topic's instructor.							
		 O TA Duties (1) Help lead experiments, explain how to use laboratory instruments/equipment, answer student questions about reports etc. (i.e. assist the instructor) (2) Assist with maintaining/inspecting laboratory instruments/equipment (3) Help prepare, make, and distribute class materials (4) Assist with calling students about reports etc. (5) Other duties that have been approved as necessary to the class. 							
		\bigcirc TA Hours The working time for one experiment is 6 hrs. The total hours for the semester will be 3 hrs. training + 6 hrs. class assistance x 12 = 75 hrs.							
		 TA Workflow during Experiments As a TA, during experiments help the instructor lead the experiment and cooperate so that it can be conducted smoothly and safely. (1) On the day of the experiment, report to work at the laboratory office on the 2nd floor. (2) After signing the attendance sheet, pick up the materials etc. (3) Unlock the instructors' room in the laboratory. (4) Prepare laboratory instruments/equipment and experimental materials. (5) Help lead the experiment with the instructor. (6) After the experiment, inspect the laboratory instruments/equipment. (7) Confirm with the instructor that the experiment is over, then lock the instructors' room. O Duties specific to experiment topics 							
Workplace		Kawauchi Kita Campus/Student Laboratories							
Days, Periods etc.		See table below (coordinate separately to determine workdays)							
Day	Period	Field	Hours/Session	Total Hours	Recruitme nt Quota	Notes			
TUE/THU/FRI	3, 4	Biology	6 hrs. (12 times) + 3 hrs. training	75 hrs.	12				
Points to Note		 Recruitment regardless of field is possible. If you wish to apply, please obtain approval from your supervising professor in your affiliated laboratory before applying for TA duties. Please understand in advance that you may not be hired if there are many applicants. Since communication in Japanese may be required for the job, if you are unable to speak Japanese, please be aware that depending on the assigned tasks, your application may be declined. If you are engaged as a TA for multiple courses, please ensure that your total working hours in a single day do not exceed 7 hours and 45 minutes. Also, if your work exceeds 6 consecutive hours, you are required to take a break. In principle, transportation expenses are not reimbursed for TA work. 							

List of Topics

Theme	Topic	Topic Title	Field	Duties specific to experiment topic	
	1	Environmental Radioactivity	Physics, Earth Science	Handle a Nal(TI) scintillation detector Manage checking sources	
I. Earth and the Environment	2	Quality of Water in the Hirose River	Chemistry	Handle glass instruments Prepare reagents Waste fluid disposal	
	3	Gravity on Earth	Physics, Earth Science	Maintain research equipments Facilitate group work	
	4	Electrical resistivity	Physics	Handle liquid nitrogen	
II. Materials	5	Synthesis and Characterization of Conductive Polymers	Chemistry	Handle glass instruments Prepare reagents Waste fluid disposal	
	6	Synthesis of organic compounds	Chemistry	Handle glass instruments Handle gas chromatography equipment Prepare reagents Waste fluid disposal	
III. Energy	7	Atomic spectra	Physics	Adjust spectrometer slits Handle discharge tubes and prepare discharge devices (wiring etc.)	
	8	Electrolysis of Water and Energy	Chemistry	Prepare fuel cell experiment kits (adjust circuits etc.)	
IV. Science and Culture	9	Vibrational Modes of Strings and Music	Physics	Handle guitars, pianos (no experience needed)	
	10	Cells and DNA	Biology	Handle biological and reflected-light microscopes Prepare reagents	
V. Life	11	Detection of the Differences in Genomic DNA Sequences from Different Animals	Biology	PCR experiments	
	12	Physics of Biopolymers (DNA)	Physics	Handle lasers	

Introductory Science Experiments (Sciences)

* Subjects highlighted in gray will not be offered in the 2025 academic year.