



New Student Orientation



Research Ethics

Research Ethics Education in GSES

Fair Research Promotion Committee
Graduate School of Environmental Studies

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Research Misconduct

Typical Misconduct in Research : “FFP”

Fabrication (捏造) Making up data or results and recording or reporting them.

Falsification (改竄) Manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

Plagiarism (盗用, 剽窃) Appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

(Definition by “Federal Policy on Research Misconduct”, MEXT, Japan)

https://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu12/siryu/attach/1334741.htm

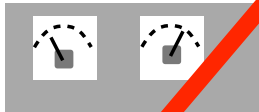
Fabrication

Oh, yes!
In my theory, the data must be on this line!

But, you need more data points to prove it and to finish your thesis.

No time to do more experiment.

I know the data point must be here...

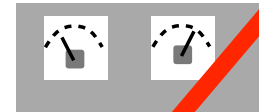


Falsification

What happened with this data point?

It must be affected by a noise. It will be criticized by a reviewer of the journal.

I do not know the reason.
But, Professor says it is a noise. I do not need this data point...



Plagiarism

Copy-Pasting sentences or figures :
Using published data or idea :

from journals, books, reports in printed or digital sources

without proper acknowledgement / permission

Intentionally or Unintentionally

In writing journal papers or theses.

In writing class reports.

In making class presentations.

Punishment
depending on
the seriousness
of the case

Proper citation

Style of citation depends on the research field.

To clarify where the original idea has come from.

Use of idea, data, equations, etc.:

Note in the text, and show the source in the reference list.

Use of text :

Quote the text in quotation marks, with indentation, or in italic fonts, etc. without modification.

Use of drawings, photo, graph, etc.:

Note in the text and on the corresponding material. Show the source in the reference list. You may need to get permission from the publisher of the source.

Research Ethics

~Guidelines for responsible conduct in research~

What you should and shouldn't do in research.

Research misconduct : Fabrication, Falsification, Plagiarism

Proper data management and handling : How to get, analyze, and store data.

Rules in collaborative research : Data management. Conflict of interest.

Proper publication : Proper authorship and citation. Double publication.

Social responsibility of researchers : Responsibility to the society and to the Earth.

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As an individual who will be involved in research activities in Tohoku University, a student is required to acquire correct knowledge about research ethics and to put it into practice in his/her research life .

According to the guideline of Research Ethics Education in Tohoku University, **GSES will request the students to practice the following items:**

① *At least once during a Master's or Doctoral course*
Get the prescribed course of "eAPRIN" (e-learning program) provided by Association for Promotion of Research Integrity. (<https://www.aprin.or.jp/en>).

The course will consist of 7 to 8 modules.

Access ID and the name of the course will be notified later by GSES educational office. Submit the certificate that will be issued after you have finished the course.

② *At least once a year*
Participate in a Laboratory Seminar on research ethics in-practice.
PhD students are requested to **help** the staffs holding the seminar.

GSES asks the supervisors to hold a laboratory seminar about research ethics in-practice. It includes how to acquire and record data, how to write notebooks, how to write journal paper, etc. M.S. course students should participate in the seminar, and PhD course students should help the staffs to hold the seminar and to put ethics into practice.

For a student whose laboratory is not in a Core Division of GSES

A research ethics education program may be provided by the institute to which your laboratory belongs. One or both of the above items may be exempted depending on the content of the program. Ask your supervisor.