

Comments on Academic Integrity

R Gilman

Don't lie, cheat, or steal. Give appropriate credit.
Ethics training.

Don't harass, don't abuse.
Act professional.

School of Graduate Studies pamphlet: Academic Integrity: Issues for Graduate Students

Plagiarism is the representation of the words or ideas of another as one's own in any academic work.

To avoid plagiarism, every direct quotation must be identified by quotation marks, or by appropriate indentation, and must be cited properly according to the accepted format for the particular discipline.

Acknowledgment is also required when material from any source is paraphrased or summarized in whole or in part in one's own words. To acknowledge a paraphrase properly, one might state: to paraphrase Plato's comment... and conclude with a footnote or appropriate citation to identify the exact reference.

A footnote acknowledging only a directly quoted statement does not suffice to notify the reader of any preceding or succeeding paraphrased material.

Information that is common knowledge, such as names of leaders of prominent nations, basic scientific laws, etc, need not be cited; however, the sources of all facts or information obtained in reading or research that are not common knowledge among students in the course must be acknowledged.

In addition to materials specifically cited in the text, other materials that contribute to one's general understanding of the subject may be acknowledged in the bibliography.

Two levels of violations are recognized by the Academic Integrity Policy—separable and nonseparable. For graduate students nearly all violations are considered separable.

Sanctions for separable violations include, but are not limited to:

- A grade of XF (disciplinary F) for the course.
- Disciplinary probation.
- Dismissal from a departmental or school honors program.
- Denial of access to internships or research programs.
- Loss of appointment to academically-based positions.
- Loss of departmental/graduate program endorsements for internal and external fellowship support and employment opportunities.
- Removal of fellowship or assistantship support.
- Suspension for one or more semesters.
- Dismissal from a graduate or professional program.
- Permanent expulsion from the University with a permanent notation of disciplinary expulsion on the student's transcript.*

*from the *Rutgers University Academic Integrity Policy*

academicintegrity.rutgers.edu

If you are not wholly familiar with conventions of citation, purchase a reference guide that is standard for your discipline. Among the most widely used guides are:

The Chicago Manual of Style (17th edition).
Chicago: University of Chicago Press, 2017.

MLA Handbook (8th edition).
New York: Modern Language Association of America, 2016.

Publication Manual of the American Psychological Association (6th edition).
Washington, DC: American Psychological Association, 2009.

If you have questions about academic integrity, get them answered *before* jeopardizing your career. Speak to your faculty adviser, your graduate program director, or one of the deans of the School of Graduate Studies (848-932-7747).

June 2018



Academic Integrity: Issues for Graduate Students



I will be plagiarizing from this pamphlet.

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Academic Standards

All graduate students have a responsibility to understand and to uphold the standards of the academic community. Without a commitment from all members of the community to work honestly and fairly, intellectual inquiry will suffer. A high standard of honesty and integrity is expected of you—as a student, as a researcher, and as a teacher.

Because academic integrity is such a basic element in the scholarly enterprise, it is useful to review the expectations of the institution and of your colleagues in relation to your academic work and your teaching responsibilities. It is the responsibility of every student to understand these standards thoroughly and to act in accordance with them.

This brochure outlines the expectations the university has for its graduate students. In addition, most disciplines have a code of conduct by which their members are expected to abide. Graduate students are expected to be aware of the University's policy and of their discipline's ethical code and act accordingly. Failure to comply with these codes is grounds for dismissal from a graduate program.

The *Policy on Academic Integrity* is online at <http://academicintegrity.rutgers.edu>. Please review it.

Your Responsibilities

All work submitted in a graduate course must be your own.

It is unethical and a violation of the Academic Integrity Policy to present the ideas or words of another without clearly and fully identifying the source. Inadequate citations will be construed as an attempt to misrepresent the cited material as your own. Use the citation style preferred by your discipline.

Students may never:

- Quote or paraphrase another, including material from the Internet, without complete citation;
- Cite a source that has been identified through a secondary source but has not been consulted;
- Collaborate with others on assignments or exams without the explicit permission of the instructor;
- Use materials during an exam that have not been sanctioned by the instructor of the course;
- Look at or copy the work of another student during an exam;
- Submit the work completed in one class to fulfill an assignment in another without the consent of the instructor.

As a Student

Data must be accurate and complete. Appropriate credit should be given to all who contribute to a project.

The following actions would, in most cases, constitute a violation of the researcher's ethical code:

- Falsify/fabricate data or results;
- Selectively withhold data that contradicts your research;
- Misuse the data of others;
- Present data in a sloppy or deceptive manner;
- Fail to maintain accurate laboratory notebooks;
- Fail to credit authors appropriately. All contributors should be acknowledged;
- Sabotage/appropriate the research of another;
- Misuse research funds or university resources for personal use;
- Develop inappropriate research/industry relationships for personal gain;
- Fail to comply with federal and/or Rutgers guidelines for the treatment of human or animal subjects.

As a Researcher

All teachers have a responsibility to their students to:

- Have or acquire the knowledge to teach assigned courses and the teaching skills to facilitate learning;
- Inform students of their expectations and requirements at the beginning of the semester;
- Evaluate student performance in a fair and timely manner;
- Treat all students fairly;
- Avoid sexual relationships with students;
- Insure that while their teaching may be informed by their personal beliefs, it should not be controlled by them;
- Keep all information about students confidential; inform others only on a need-to-know basis.

As a Teacher

I will be plagiarizing from this pamphlet.

Academics – Working Together

All work submitted in a graduate course must be your own.

- **AI pamphlet: Never collaborate with others on assignments or exams without the explicit permission of the instructor**
- General expectation of P and A faculty is that, in doing labs and homework, you will work together in groups to understand the material, and work out the solutions. You will talk to each other.
 - This helps you think and learn.
 - It is how we do research.
 - Best to work alone first, then together. Any results you present are ones you (think you) understand as being correct. They should not be simple copies of other people's work.
 - Faculty might not even think to mention this for homework.
- Exams are different: any take home exams (unusual) should be worked on independently.

Academics - Citations

Students may never:

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- Cite a source that has been identified through a secondary source but has not been consulted;

Academics – Citations

- In writing papers you should properly reference what you are writing.
- Some ideas are viewed as generally known, “textbook physics”. They appear in core courses. These generally do not have to be referenced, unless some obscure point comes up.
 - People generally do not reference Newton for classical mechanics, Maxwell, Faraday, ... for E&M, Einstein for Special Relativity.
- Non-textbook physics, “recent” results in the field, should be referenced. It is more proper to reference original research articles, but sometimes okay to reference review articles.
- “Recent” results in the field, which might appear in specialized textbooks, are usually referenced.
 - “The first measurement of the quantum Hall effect [#] ...”
- You should not reference something you have not read.

Academics – Plagiarism

- In describing previous results, it is sometimes best to directly use the published words of another author. Such quotes should generally be brief.
- The words should appear in quotes, and you must give a reference that indicates where the words originally appear.
- We use turnitin to review PhD theses for plagiarism.
- It is standard for theses to have turnitin plagiarism scores of 15 – 20%, mainly due to reuse of common scientific / technical terms. “Density functional theory” gets tagged, for example. It is hard to have an original description of the CMS experiment. A personal favorite: “A dissertation submitted to the ...”
- One issue concerns “stapling together published papers into a thesis”. It is okay to note that a chapter is “based on Smith et al. [#]” or “a lightly edited version of Smith et al. [#]” if Smith is the author of the thesis and not use quotes.

Research

The following actions would, in most cases, constitute a violation of the researcher's ethical code:

- Falsify/fabricate data or results;
- Selectively withhold data that contradicts your research;
- Misuse the data of others;
- Present data in a sloppy or deceptive manner;
- Fail to maintain accurate laboratory notebooks;
- Fail to credit authors appropriately. All contributors should be acknowledged;
- Sabotage/appropriate the research of another;
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Not common issues in P and A

Research - Data

- Data should be honestly analyzed and reported.
- Do not falsify or fabricate (make up) results.
 - You will be caught eventually.
 - Even if confirmation of results is difficult, anything significant will be reproduced through other measurements and analyses, and anything not reproduced is not significant, so why are you doing it?
 - Downsides to cheating: no one wants to work with you, lose ability to get grants
- Experimenters are (IMHO) not great at estimating systematic uncertainties - often experimental results disagree by more than expected from claimed uncertainties. It is okay to be wrong.
- The paper should clearly state what was done, at a level sufficient that others in the field can (in principle) reproduce it.

Research - Data

- Laboratory notebooks are not as common as they used to be. Many of us have electronic experiment notebooks, and no longer maintain the personal lab notebook.
- Sabotage the research of another... We are regularly asked to review each other, and should be honest about conflict of interest in doing so. In submitting papers, authors are at times given the option of suggesting people who should not referee the paper.
- Misuse research funds: all funds should be spent in support of the funded research. Usually there is some flexibility in the budget, and Rutgers reviews what we do.

Research - Authorship

- Different subfields have somewhat different understandings of who should be an author, vs. who should be thanked / acknowledged. Generally, anyone who contributes significantly should be an author.
- Scientists are generally authors. "Technicians" are generally acknowledged / thanked. But sometimes they are authors.
- People who help the research along through conversations about a particular point are generally thanked; people who are an ongoing part of the development of the science even if only through conversation are generally authors.
- Experimental collaborations often make well defined (if somewhat arbitrary) rules for authorship.
- Various subfields also have different rules about the ordering of authors. Alphabetical ordering is common. Sometimes the ordering indicates "significance" of contribution. (Often students and postdocs first.)

Teachers

All teachers have a responsibility to their students to:

- Have or acquire the knowledge to teach assigned courses and the teaching skills to facilitate learning;
- Inform students of their expectations and requirements at the beginning of the semester;
- Evaluate student performance in a fair and timely manner;
- Treat all students fairly;
- Avoid sexual relationships with students;
- Insure that while their teaching may be informed by their personal beliefs, it should not be controlled by them;
- Keep all information about students confidential; inform others only on a need-to-know basis.

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An occasional issue.

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A never-get appointed as a TA again issue.

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Faculty should have this rule with respect to you as well.

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A big legal problem. Never give out information on anyone to someone not part of the class teaching structure.

Notes on Professional Behavior

Allies Programs: Started in astro; nuclear physics version informed by astro experiences

DNP allies:

<https://www.aps.org/units/dnp/allies/>

Sarah Jane's diary:

<https://www.aps.org/units/dnp/allies/diary.cfm>

Be nice to your colleagues, they may be your reviewers some day.