



Faculty of Engineering The Chinese University of Hong Kong

# GUIDELINES TO ACADEMIC HONESTY



#### Foreword

This booklet contains guidelines for undergraduate students in their pursuit of academic honesty in academic works, which is one of the core values of higher learning. Guidelines and examples in this booklet are more related to engineering studies. **Students in the Faculty should always refer to the more comprehensive University guidelines at** 

http://www.cuhk.edu.hk/policy/academichonesty/.

The first part of this booklet lays out the Faculty's expectation on academic honesty and gives concrete examples of plagiarism in the context of engineering studies, so that students can have a better understanding on how to make proper use of source material and discussion results in engineering assignments, laboratory reports, and projects. The second part deals with the penalty policy of the Faculty Disciplinary Committee, so that students are fully aware of the possible consequences.

In case there is any doubt on these guidelines or whether a certain act is considered plagiarism, students should seek clarification from teachers of the respective courses and should never make their own assumptions/ interpretations.

#### Overview

Advancement of the knowledge frontier is seldom a result of solo work but relies on collaborative effort by the research community at large. Many breakthroughs were built upon the work of great scholars of the past. However, when preparing one's findings or results, credits must be given where credits are due. Plagiarism is essentially using (by way of, e.g., copying/quoting/paraphrasing) other's original work without giving credit to or acknowledging the source. In the context of engineering studies, the work involved is typically computer programming and mathematical/scientific problem-solving assignments. In general, it is difficult to formulate precise guidelines on when computer program codes or mathematical derivation/proof fragments are plagiarized from another source, since allegations of this sort depend on the amount of similar codes or structures, and plausibility of two persons coming up with the same tricky idea. However, while it is possible for two different people to come up with similar solution methods, there is usually more than one way of coding an algorithm or phrasing a mathematical derivation. Therefore, appearance of (a) substantial identical or similar structures. (b) identical or similar non-trivial structures, or even (c) identical or similar mistakes in two submissions is a good indication of possible plagiarism. For a more comprehensive discussion of plagiarism and the proper use of source material, students are strongly advised to refer to the University guidelines on Honesty in Academic Work.

#### **General Principles**

Students are expected to submit their own work in their courses. In the Faculty of Engineering, most plagiarism cases involve a student (a) copying in whole or in part of a work of fellow classmate(s) or friend(s), who may or may not have to submit the same assignment, or (b) using source material from books or the internet without citation. To uphold the standard in academic work and academic honesty, students must observe the following rules:

#### 1. Do not look at solutions that are not your own

These include, but are not limited to, solutions from the internet or solutions from another student (past or present). Basically, you should not look at someone else's solutions when solving the assignment problems. It is not an appropriate way to "make sure I get things right", "get hints", or "learn alternative approaches". Students who submit works that are copied or derived from others' works as their own will be liable for plagiarism.

#### 2. Do not share your solution with others

You should under no circumstance give your solution to other students or ask other students to give you their solutions. For instance, you should not give your solution to another student and ask him/her to turn it in for you; you should not disseminate your solution via email, chat groups, social media, websites, etc. You should also take reasonable measures to secure your solution. For instance, you should never leave your work on public computers where other people can see. Following the spirit of this rule, you should not discuss / share / teach your solution approaches to such an extent that you and your fellow students turn in highly similar solutions. Students who are found violating this rule will be liable for plagiarism.

#### 3. Give proper acknowledgement to any help that you received

The help could be in the form of discussion with other student(s) or source materials related to the assignment. For the former, you should indicate from whom you receive the help and what help you received. For the latter, you should give a proper citation of the materials. It should be noted that the "help" mentioned in this rule should be of general nature and should comply with Rules 1 and 2 above. Students who fail to give proper acknowledgement to the help they received to finish their work will be liable for plagiarism.

The bottom line is that while students are encouraged to discuss ideas together and seek general advice when needed, they must work out their own work and give credits where credits are due. Having the acknowledgement of other student(s) does not absolve the students, if Rules 1 and 2 stated above are violated.

### **Case Studies**

#### **Computer Programming Assignments**

The following are examples of improper use of other people's work in the context of computer programming assignments.

**Original source:** Student A came up with the following routine in the C language for use in an assignment (which contains other parts):

```
/*-----*/
int findLargest(int size, int a[]) {
    int i, tmp = 0;
for (i = 1; i < size; ++i)
        if (a[i] > a[tmp])
            tmp = i;
    return(tmp);
}
/*-----*/
```

**Example 1: Improper (plagiarism by straight copying)**: Student B copied Student A's routine verbatim (having the acknowledgement does not absolve the students from Rules 1 and 2 under "General Principles"):

**Example 2: Improper (plagiarism by changing variable names)**: Student C copied Student As routine and performed only a systematic change of variable names:

```
/*_____*/
int findL(int s, int b[]) {
    int j, tmp1 = 0;
    for (j = 1; j < s; ++j)
        if (b[i] > b[tmp1])
            tmp1 = j;
    return(tmp1);
    }
/*_____*/
```



**Example 3: Improper (plagiarism by superficial changes):** Student D basically copied Student A's routine and performed some superficial reordering of statements and expressions:

```
/*-----*/
int findLargest(int size, int a[]) {
    int tmp;
    int i;
    tmp = 0;
    for (i = 1; i < size; ++i)
        if (a[tmp] < a[i])
            tmp = i;
    return(tmp);
}
/*-----*/</pre>
```

**Example 4: Improper (plagiarism by slightly more structural changes)**: Student E basically copied Student As routine and performed a simple transformation of the for-loop into a while-loop:

```
/*-----*/
int findLargest(int size, int a[]) {
    int tmp;
    int i;
    tmp = 0;
    i = 0;
    ++i;
    while (i < size) {
        if (a[i] > a[tmp])
            tmp = i;
        ++i;
        }
        return(tmp);
    }
/*-----*/
```

#### **Using Results from Discussions**

The following examples serve to help you avoid technical faults and build up a right attitude towards group discussions.

**Example 1:** In a computing assignment you are asked to write a program to sort a given set of 5-digit numbers. You may discuss with your classmates on sorting methods, general programming techniques, or functions specific to the language being used. You must however write your own program without assistance from others.

**Example 2:** You are doing a laboratory experiment with another two group members. After taking the necessary data, all three of you examine the data together to see if they comply with the theory. While the raw data can be shared and presented identically in your reports, each of you must write in your own words your interpretation of the data, their agreement or disagreement with the theory, and your conclusion.

**Example 3:** In a math assignment you are asked to find the inverse of a 3-by-3 matrix. In this calculation you need to find the determinant of this matrix but you have the knowledge only for a 2-by-2 matrix. You may ask someone to teach you how to cope with a general 3-by-3 case but you must perform the actual calculation by your own effort.

## Lab Reports

The following are improper ways to prepare a lab report.

**Example 1: Improper (looking at other's solution)**: A group of students, Ming and Man, had just finished their lab work. They left the lab and worked on the report in the computer room. Then, they discovered that their data was not quite right. So, they consulted their classmates Ho and Hei and checked their data against their own.

**Example 2: Improper (plagiarism):** Indeed, Ming and Man had overlooked a crucial step in the measurement and got the wrong results. Since the lab had already been closed, and Ming and Man did not want to take the trouble to repeat their lab measurement, so Ming suggested that they just replaced their wrong data with Ho and Hei's data.

**Example 3: Improper (sharing solution with others)**: Man thought that it would not be courteous to use other's data without asking, so Man sought Ho and Hei's consent to just pull a small portion of the lab data from their report and graft into theirs. As good citizens with kind hearts to help others, Ho and Hei consented.

**Example 4: Improper (plagiarism):** Ho and Hei did the lab experiment as a group. The teacher of the lab course has stated that students doing the lab experiments in a group must still submit their own lab reports. However, Ho and Hei submitted two identical lab reports.

Referring to Example 2 under "Using Results from Discussions", this means that although the raw data can be presented identically in Ho and Hei's lab reports, everything else (such as answers to lab questions, interpretation of data, conclusions, etc.) must be written in their own words.

#### **Using Materials from the Internet**

There is abundant information available in different formats on the internet. With powerful search engines like Google, one can retrieve useful online articles or writings by simply inputting a few keywords of interest. This is an effective way of retrieving timely information and should be encouraged.

However, one must be careful when he/she would like to incorporate such online information into his/her own work. It is considered plagiarism if a student includes the original text, in whole or in part, of an article that he/she finds on the internet into his/her assignment/report without properly acknowledging the source of the information.

# Example 1: Suppose that you would like to write a paper on the history of internet. The following is part of an online article (http://www.isoc.org/ internet/history/brief.shtml):

"The original ARPANET grew into the Internet. Internet was based on the idea that there would be multiple independent networks of rather arbitrary design, beginning with the ARPANET as the pioneering packet switching network, but soon to include packet satellite networks, ground-based packet radio networks and other networks. The Internet as we now know it embodies a key underlying technical idea, namely that of open architecture networking."

# The following paragraph copies/paraphrases the original text of that article without mentioning the source of information. This is obviously plagiarism:

"The Internet was developed from the original ARPANET. Internet was based on the idea that there exist multiple independent networks of rather arbitrary design. It began with ARPANET as the pioneering packet switching network, and soon included packet satellite networks, ground-based packet radio networks and other networks. The Internet as we now know it embodies a key underlying technical idea, namely that of open architecture networking."

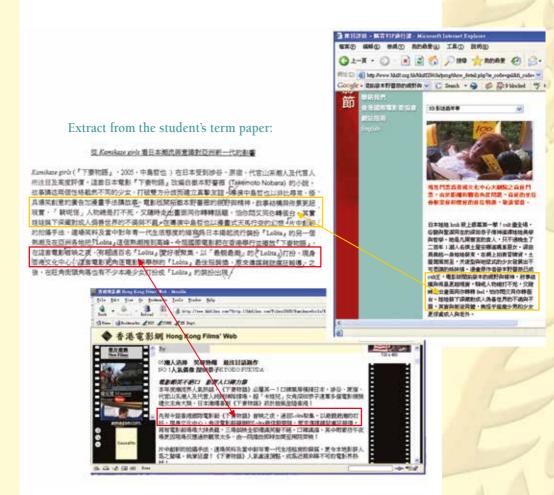
# The following shows a proper incorporation of the information provided in that article:

"The Internet was developed from the original ARPANET. It attempted to connect a number of independent computer networks that might have arbitrary design.<sup>1</sup> Initially, only packet switching network was included. Packet satellite networks, ground-based packet radio networks and other networks were introduced at a later time. The key idea of Internet is the so-called "open architecture networking"."

<sup>1</sup>Barry M. Leiner et al., A Brief History of the Internet, Online article available at http://www.isoc.org/internet/history/brief.shtml.

#### Example 2:

A case of plagiarism in a General Education term paper.



### **Penalty Scheme**

The minimum penalty for plagiarism and undeclared multiple submissions formulated by the Senate Committee on Student Discipline is highlighted below:

First-time offender will receive one demerit on the academic transcript that may be reviewed and a zero mark for that component of the course. Moreover, he/she will be required to complete relevant training in academic honesty.

Second- or more-time offender will receive two demerits (of which one will remain in the University's record permanently) on the academic transcript and a failure grade for the course concerned.

According to the University regulations, students who have received a total of three or more demerits will be reported to the Senate Committee on Student Discipline for final decision, which can be suspension/termination of studies.

Students who share their work with others and result in their work being copied will be considered as having committed plagiarism. The penalty will be one demerit (reviewable or non-reviewable).

According to University policies, each student in a group work is responsible and liable to disciplinary actions should there be any plagiarized contents in the group work, irrespective of whether he/she has contributed directly or indirectly to the plagiarized contents.

Note: The demerit(s) (if reviewable) will be removed from the University's record by the time of graduation of the student concerned if no further offence is committed and satisfactory completion of the required training in academic honesty.

For detailed University guidelines on Academic Honesty, please refer to the website http://www.cuhk.edu.hk/policy/academichonesty/.

## **Procedures for Handling Student Disciplinary Cases**

Undergraduate Studies

College Disciplinary Committees (for cases of nonacademic nature) Faculty Disciplinary Committee (for cases of academic nature)

Graduate School Disciplinary Committee (for cases of nonacademic nature)

Postgraduate

Studies

The student concerned is allowed to lodge an appeal, within seven working days of receiving the decision letter from the disciplinary committee, to the Senate Committee.



The appeal, if accepted, will be handled by a Panel of Judges formed under the Senate Committee or by the Senate Committee in full session. The decision of the Panel of Judges/ Senate Committee shall be final.

When the disciplinary case involves students belonging to different Faculties/Colleges, involves both undergraduate and postgraduate students, or when the case is deemed very serious in nature, it shall be handled by the Senate Committee directly, by means of a Panel of Judges formed under the Senate Committee.



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