

Faculty of Engineering
The Chinese University of Hong Kong

August 2008

GUIDELINES TO ACADEMIC HONESTY



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This booklet contains guidelines for undergraduate students in their pursuit of academic honesty in academic works, which is the core value of higher learning. Guidelines and examples quoted here are more related to the Engineering context. Students in the Faculty should always refer to the more comprehensive University guidelines at the website: <http://www.cuhk.edu.hk/policy/academichonesty/>.

First part of this booklet cites concrete examples in the Engineering environment such that students would have a deeper understanding on what constitute plagiarism in making use of materials and discussion results for Engineering assignments, laboratory reports, and projects. The second part deals with the penalty policy of the Faculty Disciplinary Committee such that students are fully aware of the possible consequences.

If students are still in doubt as to whether certain act is clear of plagiarism, they should always seek assistance from tutors and teachers in their Department, or the Secretary of the Faculty Disciplinary Committee (c/o Engineering Faculty Office, at Room 608 Ho Sin Hang Engineering Building, tel: 2609-8446, email: facultyoffice@erg.cuhk.edu.hk)

Some examples of plagiarism in “Computer” Programming

Plagiarism is not restricted to just quoting/paraphrasing from publications without acknowledgement. In many cases, plagiarism involves a student (the “copier”) copying parts or whole of work of fellow classmate(s) or friend(s) (the “provider(s)”), who may or may not have to submit the same assignment. Here, we consider cases in which the providers consciously furnish their own work for the copiers’ plagiarizing purposes, so that both the copiers and the providers are to be held liable in the offense. If a copier copied without a provider’s consent, the case will be handled as theft.

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. Therefore, copying is not equivalent to plagiarism but credits must be given where credits are due. By this principle, a student can choose to copy peers’ work in an assignment when necessary, provided that proper acknowledgement is given. The copied parts only constitute a minor part of the work submitted. Of course, teachers concerned would certainly take this fact into account in evaluating the student’s effort and work.

In case of term paper assignments, prior examples and guidelines of plagiarism from publications are all applicable in this context. In the case of computer programming and mathematical/scientific problem solving exercises, while it is possible for two different persons to come up with similar solution methods, there is usually much more than one way of coding an algorithm and phrasing a mathematical derivation.

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 depends on the amount of similar codes or structures, and plausibility of two persons coming up with the same tricky idea. 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, however, a good indication of possible plagiarism. Teachers concerned would have to examine the suspected submissions more closely, exercise professional judgment, and, perhaps also, consult other colleagues to come up with a conclusion. Students should also be prepared to appear before the teachers concerned to, for example, describe the working principle and machineries of the submitted work.

In the following, we give examples of proper and improper uses 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 use (straight copying): Student B copied student A's routine verbatim.

```
/*-----*/  
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 2: Improper use (paraphrasing 1--change of variable names): Student C copied student A's 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[j] > b[tmp1])  
            tmp1 = j;  
    return(tmp1);  
}  
/*-----*/
```

Example 3: Improper use (paraphrasing 2--superficial changes): Student D basically copied student A's routine, and performed some superficial re-ordering 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);  
}  
/*-----*/
```

Example 4: Improper use (paraphrasing 3--slightly more structural changes):

Student E basically copied student A's routine, and 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);
}
/*-----*/

```

Example 5: Proper use (quoting and acknowledging): Student F did not know how to write the findLargest() routine, but did not want to jeopardize the completion of the entire assignment. Student F copied student A's routine, and acknowledged the copying. It is envisaged that teachers will take into account of the quoted work when awarding marks.

```

/*-----*/
/*****/
/* Copied from my classmate Student A * /
/*****/

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);
}
/*-----*/

```

How to make use of results from “Discussions with Fellow Students”

We discuss with our teachers or fellow students in order to understand a subject better. In many cases discussions are even more fruitful than study on your own and hence they should be encouraged. However, we should also note, that when transferring the results of a discussion to an individual assignment like writing a computer program or solving an equation, care must be taken in order not to commit plagiarism. The following examples will help you not only to avoid any technical faults but also to build up a right attitude towards this useful learning tool.

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 will together examine the data 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 these 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 this 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.

Case study of plagiarism in Lab reports

1. 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.

Q: Is it OK to consult another group and look at their results?

2. 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 correct data.

Q: Is it an act of plagiarism to replace the lab data taken by another group?

3. 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.

Q: Should good citizens allow their lab data to be used by another group?

4. After the lab reports were submitted, the TA discovered that the two group reports had contained identical lab data and explanations, so a clear case of plagiarism was established. Ho and Hei explained to the TA that it was Ming and Man who copied from them.

Q: Would Ming and Man receive a demerit because they copied another group's result? Would Ho and Hei receive a demerit just because they shared their work with another group?

5. What should Ming and Man do to avoid the plagiarism?

- Go back to the lab at some other time and redo the invalid part.
- Leave out the invalid part and just submit the lab report.
- Use Ho' and Hei's data but state clearly in the report that the data was obtained from another group.

6. Instead of lending their data to Ming and Man directly, how could Ho and Hei help their classmates?

- Ask Ming and Man to explicitly state in the lab report that they have consulted Ho and Hei and use their data.
- Explain the concept without showing the lab data.
- Look at Ming and Man's data and tell them where they got wrong.

How to make use of materials from Internet

There is abundant information available in different formats on the internet. With the 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 to be plagiarism if a student includes the original text of the whole or 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 directly copies 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 design¹. Initially, only packet switching network was included. Packet satellite networks, ground-based packet radio networks and other networks were introduced in a later time. The key idea of Internet is the so-called “open architecture networking”.

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

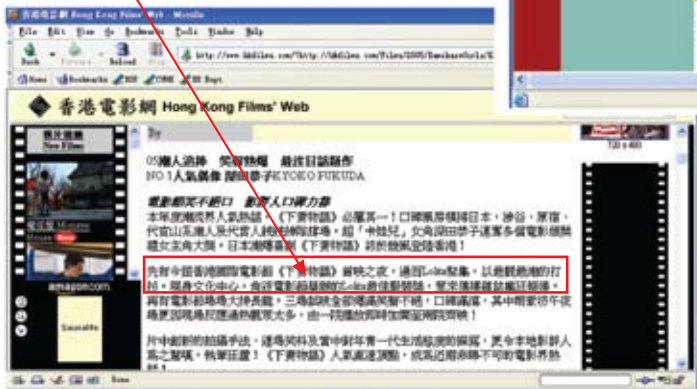
Example 2:

A case of plagiarism on a General Education term paper:

Extract from the student's term paper:

從 *Kamikaze girls* 看日本潮流對香港新一代的影響

Kamikaze girls (《下妻物語》, 2005, 中島哲也) 在日本受到沙谷、原宿、代官山系潮人及代官人所注目及高度評價。這套日本電影《下妻物語》改編自藤本野零 (Takimoto Nobara) 的小說。故事講述兩個性格截然不同的少女, 打破雙方分歧而建立真摯友誼。導演中島哲也以對比尋常、極具煽動性的廣告加漫畫手法講故事。電影展現出藤本野零的視野與精神, 故事結構與你更貼近現實, 「轉呢個」人物總是打不死, 又隨時走出畫面而令轉轉話。怕你問及問你轉個台, 其實她對下深處對成人偽善世界的不滿與不願, 在導演中島哲也以漫畫式天馬行空的幻想 (片中創新的拍攝手法, 連場笑料及當中對年青一代生活態度的描寫為日本揚起流行與扮「Lolita」的另一個熱點及在亞洲各地把「Lolita」這個熱點推到高峰, 令國際電影節在香港舉行並播放《下妻物語》, 在這套電影放映之夜, 有超過百名「Lolita」愛好者聚集, 以「最靚最靚」的「Lolita」打扮, 現身香港文化中心 (這套電影更向這電影學院的「Lolita」最佳服裝獎, 意文傳媒雜誌瘋狂報導, 之後, 在旺角街頭角滿也有不少半老半少女子扮成「Lolita」的裝扮出現。



Penalty Scheme

The Penalty Scheme adopted by the Faculty Disciplinary Committee for implementation effective 2006-07 is detailed below:

- First time offender will receive one demerit in transcript that can be reviewed for each plagiarism/cheating, compulsory AHEP (see note) and an “F” grade for the assignment/lab report/test/exam or the entire course in question, depending on the severity of the case.
- Second or more time offender will receive two demerits in transcript that cannot be lifted for each plagiarism/cheating, and an “F” grade for the entire course in question.
- Students who have received a total of three demerits will be reported to the Senate Committee on Student Discipline for consideration of the more severe penalty of suspension/termination of studies.

All those who willingly allow others to copy his/her work will be considered having aided plagiarism and those who have aided cheating will receive the same penalty as the offenders.

Note:

Academic Honesty Education Programme (AHEP) is a scheme designed by the Faculty Disciplinary Committee (FDC) with a view to assisting students who have committed plagiarism or cheating to reflect on the situation and to better understand the matter to avoid further entanglements with plagiarism and cheating. Students will work under the guidance of a teacher in this programme, do a report after reading an article or a book on ethical theme(s) and do good works to assist the Faculty to promote academic honesty or community services for a period of normally about one term. All AHEP works will be reviewed by the CUPIDE system for originality. If FDC considers the results of such works satisfactory, the demerit would be reviewed and might be lifted before the student graduate.