

Referencing Code – DBS Academic Integrity Guide

Computing programmes can be under the mistaken belief that referencing is not required in their Programming or Coding. This arises from the frequent professional practice of copying code from other sources, and without academic rigour inspecting these professional outputs, the practice of formal recognition of others' work is overlooked or outright ignored.

Any assessment undertaken as part of a programme of study within the College must include the appropriate referencing. Failure to reference appropriately can be interpreted as an attempt to plagiarise, by passing off another's work as your own. Academically, and ethically, this is unacceptable practice. Failure to reference appropriately may result in assessment submissions being escalated to the Academic Impropriety Committee for review, and penalties will be applied where academic impropriety is identified. Please refer to the College's [Quality Assurance Handbook](#) for our policies on Academic Impropriety.

The **Massachusetts Institute of Technology** (MIT) represents best practice in many ways in the field of Computing, and their guide on [Citing Code](#) is very helpful. We recommend visiting their guide, but key extracts are set out below:

Writing Code

Writing code is similar to academic writing in that **when you use or adapt code developed by someone else as part of your project, you must cite your source**. However, instead of quoting or paraphrasing a source, you include an inline comment in the code. These comments not only ensure you are giving proper credit, but help with code understanding and debugging.

When should I cite a source in my code?

- When you copy code from an external source. Whether you are copying a snippet of code or an entire module, you should credit the source.
- When you copy the code and adapt it, you should still credit the source. You were not the original developer of the code.

How should I cite the code?

- Generally, the URL and the date of retrieval are sufficient. Add more details if it will help the reader get a clearer understanding of the source.
- If you adapted the code, you should indicate "Adapted from:" or "Based on" so it is understood that you modified the code.
- Your lecturer may have specific instructions on how you should or should not cite your sources. If you are not clear on what is acceptable, ask your lecturer.

Citing Computer Code in Report or Paper (from the University of Arkansas)

To cite either a computer program or piece of source code you will need the following information:

- Author(s) name (Individual or corporation)
- Date
- Title of program/source code
- Code version
- Type (e.g. computer program, source code)
- Web address or publisher (e.g. program publisher, URL)

When writing a report and citing within the text, the following method (based on common IEEE and ACM citation rules for other types of references) can be used:

<author(s) names> (<date>) <title of program/source code> (<code version>) [<type>]. Web address or publisher.

Smith, J (2011) GraphicsDrawer source code (Version 2.0) [Source code].
<http://www.graphicsdrawer.com>

Use of Open Source Software

When you use code from an open source project, you need both to attribute the source and **follow the terms of any open source license that applies to the code you are using**. Keep in mind:

- When you download the source, the license is typically part of the download.
- Also, the source code itself will typically contain the copyright and terms of use.
- **When you incorporate open-source-licensed code into a program, it is good practice to duplicate the copyright in your code, and/or store the license in a file with the code.**
- If you don't obtain the license with the download, you should be able to find it on the site of the open source project, such as [Apache HTTP Server site](#), or on the [Open Source Initiative \(OSI\) site](#).

Although it is common practice to adapt code examples found on the web,

- **You should never copy code from other students.** Your peers are *not* considered an authorized source.
- **You should not simply re-use code as the solution to an assignment.** Like academic writing, your code can incorporate the ideas of others but should reflect your original approach to the problem.

Instructors determine the specific expectations around re-use of code in each class.

Often, the requirements are described in the assessment brief. If the requirements are not clearly described in the course materials and you are not sure what is acceptable, ask your instructor.

Learners may reuse designs, ideas and code from their own work earlier in the semester (even if it was done with as part of group work), but the application of these designs, ideas and code must be implemented appropriately to the requirements of the new assessment, and should not simply replicate the previous use. Assessments within and between modules should never allow for the same piece of work to be submitted twice, as if it can meet the requirements of two different assignments.

Individual work

'Individual Assignments' are intended to be primarily individual efforts. Learners are encouraged to discuss approaches with other students but an individual's code and write-up must be their own.

Learners may not use materials produced as coursework by other learners (past or present), nor may learners provide work for other learners to use.

It is good to help other learners. But as a general rule, learners should ensure their own solution is not visible, either to themselves or to the learner they are helping, in case ‘help’ starts becoming ‘giving them the answer’. Beyond putting themselves at risk of being accused of Collusion or Plagiarism, excessive assistance does not allow the classmate to learn what is required of them.

Where code is reviewed and shared in class (peer feedback exercises, etc.), it is fine to take inspiration from other learners’ approach, but learners must not copy their work.

Where learners copy off each other, both the learner taking the work, and the learner sharing their work, are held responsible for the violation in academic integrity. Copying work, or knowingly making work available for copying, is a breach of the College’s Academic Impropriety policy is a serious offense that may incur reduced grades, failing the course, and disciplinary action.

Group work

Learners should collaborate with their partners on all aspects of group project work and in-class collaborative exercises, and each group-member is expected to contribute a roughly equal share to design and implementation.

Academic Impropriety committed by one member of a group will result in the entire group submission being penalised, as the piece of work is supposed to be a single, coherent, collaborative artefact.

Learners may use material from external sources, so long as:

1. the material is available to all learners in the class;
2. proper attribution is given; and
3. the assignment itself allows it.

In particular, if the assignment says “implement X,” then learners must create their own X, not reuse someone else’s. Finally, a group may not reuse designs, ideas, or code created by another group, in this semester or previous semesters.

In summary:

WHY MUST I CITE CODE?

Citing Code, like referencing any source material in any academic piece of work, is vital to:

- acknowledge its source (respecting the intellectual property rights of others);
- provide support to your argument or claim, by identifying an authoritative source, and show an awareness of the broader academic field/ subject area;
 - allow lecturers to assess your research skills and own understanding;
 - allow researchers to locate these sources to develop their own research;
 - allow you to locate your own previous sources if you need to find them again.

WHAT IF I DON’T CITE MY SOURCES?

Failure to cite sources appropriately may result in the following penalties:

- A grade penalty, up to and including 0% being awarded, and a repeat being required;
- Escalation to the Academic Impropriety Committee, or Disciplinary Committee for repeat cases.

References:

MIT, 'Academic Integrity at MIT – Writing Code'. Accessed 21/02/2020. Available at:
<https://integrity.mit.edu/handbook/writing-code>

University of Arkansas, 'Citing Programing Code'. Accessed 21/01/2020. Available at:
<https://uark.libguides.com/CSCE/CitingCode>