Academic Integrity and Assessment -*How they are related?*

This tutorial explains our expectations in ECS of your behaviour when completing assessed work such as projects, assignments and examinations. Our expectations are the same at every stage of your studies, whether you are an undergraduate or postgraduate student. The content has been designed to help you understand exactly what will be expected of you when you undertake assessed work.
Study the materials carefully and then complete the test questions which will help you assess your understanding. If you have difficulty understanding this material please discuss your problems with your tutor.

We expect all ECS students to work through these materials and successfully complete the test questions during your first semester of study in ECS at the University. You may find it useful to review the tutorial at crucial points in your progress - for example before you engage in a major research project or dissertation.

The Power of the Web

- Increased access to the Internet, use of the World Wide Web and search engines such as Google provides an unprecedented amount of information available "at your fingertips"
- This can help you when preparing assignment (e.g. design tasks, programming, reports, and projects)
- But with power comes responsibility
- And the increased need for academic integrity

Definitions (taken from the OED)

Academic: Of or belonging to an academy or institution for higher learning; hence, collegiate, scholarly

Integrity: Soundness of moral principle; the character of uncorrupted virtue, especially in relation to truth and fair dealing; uprightness, honesty, sincerity

This tutorial will explain the following:

- Why understanding academic integrity is important to you
- How academic integrity can be breached include plagiarism, cheating, falsification, and re-cycling
- How we use automatic plagiarism detection software to help us identify breaches
- Details of penalties for breaches of academic integrity
    - students have been caught, and some have failed their degree as a result
- Guidance on how to quote (or paraphrase) and cite all your sources in a clear and standard way

The University Perspective -*Why Academic Integrity is Important*

Because the University is responsible for the award of your degree, official definitions of what is meant by the term "academic integrity" have been produced in order to clarify our official understanding of the term.

The following definition is taken directly from the University Calendar (2007-08) Section IV http://www.calendar.soton.ac.uk/sectionIV/part8a.html

"The University is a 'learning community' within which students and staff learn from each other, from their peers and through original research. All members of the University are expected to maintain high standards of academic conduct and professional relationships based on courtesy, honesty and mutual respect. In maintaining this learning community, the concept of academic integrity is fundamental.

Academic integrity means conducting all aspects of your academic life in a professional manner. It involves:

- taking responsibility for your own work;
- respecting the rights of other scholars;
- behaving with respect and courtesy when debating with others even when you do not agree with them;
- fully acknowledging the work of others wherever it has contributed to your own
- ensuring that your own work is reported honestly;
- following accepted conventions, rules and laws when presenting your own work;
- ensuring that you follow the ethical conventions and requirements appropriate to your discipline;
- if you are studying on a professionally-recognised vocational programme, maintaining standards of conduct which are appropriate to a practitioner in that area;
- supporting others in their own efforts to behave with academic integrity;
- avoiding actions which seek to give you an unfair advantage over others.

As a member of the academic community at Southampton, you are expected to work in accordance with these principles.
Acting with academic integrity enables you to demonstrate your own knowledge, skills and understanding of the subject and then to receive feedback to help you progress. You will also be developing professional skills and values which are sought by employers. Conversely, failure to act in this way means that you will not be developing the skills which are essential in the longer term for your personal and academic growth. The feedback you then receive on your work will not help you to improve as it will not be a genuine reflection on your knowledge and abilities". University Calendar (2007-08) Section IV (http://www.calendar.soton.ac.uk/sectionIV/part8a.html)

This information is also printed in the Student Handbook, pages 186-187
http://www.soton.ac.uk/studentservices/docs/20078handbook.pdf

How this translates into our expectations in ECS
When you work on assessments we expect you to work with academic integrity. In particular we expect you to:

- be honest and balanced in evaluating the strengths and weaknesses of your own work, and that of others
- conduct yourself according to the standards and conventions of your discipline
- respect the intellectual property of others, their moral rights and copyright
- avoid taking unfair advantage of others

Good Academic Practice -*Official view from the Student Handbook*

The following text is taken from the University's Student Handbook

1. A key element of academic integrity is understanding good academic practice in written work and creative practice. Understanding how to use the work of other scholars, including your peers, to develop your own insights into a subject and spark new ideas is an important professional skill. The skills you need to succeed in higher education in the United Kingdom may be different to those you have learned at School or College, or in your workplace, as you will be expected to follow professional academic conventions. Within the professional international academic community it is never acceptable to use the words of others or their creative output (whether published or unpublished, including material from the internet) without explicit acknowledgement. To do so would not be seen as a mark of respect but rather as plagiarism.
2. When you take notes from sources, make sure you do so in ways which identify where you are recording your own observations based on the document you are reading, where you are paraphrasing and where you are recording direct quotations. This will be particularly important if you are taking notes over a longer period and then reviewing them later.
3. Learn to plan your study time effectively, be aware of deadlines and leave plenty of time for writing, to avoid the need to take 'short-cuts' which could lead to bad academic practice.
4. To demonstrate your knowledge and ability effectively in assignments you need to ensure that you address the question you are asked. Including large amounts of acknowledged pasted material, or overquotation from external sources is likely to detract from the quality and originality of the work and is therefore unlikely to secure good marks.
5. The purpose of assessment is to enable you to develop and demonstrate your own knowledge and understanding of the learning outcomes of a unit or programme, or particular professional skills or competencies. It is entirely appropriate that your work should be informed by, and refer to, the work of others in the field, or to discussions with your peers, tutor or supervisor. However, such contributions must always be acknowledged in accordance with conventions appropriate to the discipline. This requires more than a mention of a source in a bibliography, which may be a practice you are used to at School or College. You should acknowledge

each instance of another person's ideas, artworks or words using the appropriate referencing conventions. It is important to make clear which are your words, ideas, or artworks and which have been taken from others.

6. It is often helpful to discuss ideas and approaches to your work with your peers, and this is a good way to help you think through your own views. However work submitted for assessment should always be entirely your own, except where clearly specified otherwise in the instructions for the assignment. In some instances working in groups will be required, and there may be occasions when work is submitted from the whole group rather than individuals. In these instances the instructions will make it clear how individual contributions to the joint work should be identified and will be assessed. If you are in any doubt, check with the person setting the assignment. If you have worked with others you should make sure that you acknowledge this in any declaration you make (see below).

7. When you submit a piece of coursework you will be asked to declare (eg through use of a signed declaration or ticked box for electronic submission) that you are aware of the requirements of good academic practice, and the potential penalties for any breaches.

The text above was taken from the University's Student Handbook pages 187-188
http://www.soton.ac.uk/studentservices/docs/20078handbook.pdf

Breaches and Penalties 1 -*Important details you have to know*

As explained above, the University has a formal understanding of what is meant by "academic integrity" which it defines in the University Calendar; and it is important that every student understands the formal definition. In addition there are formal policies and procedures laid down, which are used to govern the standards of behaviour we expect from our students when undertaking assessments. The policies and procedures determine what should be done in cases where students fall short of the standards defined in the Calendar. *Falling short of the defined standards in any way is considered to be a breach of academic integrity*

If you wish to see the policies and procedures in detail you should consult the following

Summary of Policy: You must ensure you avoid

- **plagiarism**
  - o copying or paraphrasing without acknowledgement material attributable to, or the intellectual property of, someone else
- **cheating**
  - o gaining unfair advantage for yourself or another
- **falsification**
  - o fictitious or distorted data, false claims
- **re-cycling**
  - o re-using your own work without declaring you have done so

Range of Penalties

- Your mark for the affected work may be reduced
  - o *for example, the marker will ignore any plagiarised material*
- A mark of zero may be returned
- You may fail the whole module
- You may fail the whole year
- Your degree classification may be reduced
- Your studies may be terminated
- You may be deprived of a degree
  - o *even after it has been awarded*

If you wish to see the policies and procedures in detail you should consult the following

- Section IV of the University Calendar
  http://www.calendar.soton.ac.uk/sectionIV/part8a.html
- The University's Quality Handbook
  http://www.soton.ac.uk/quality/assessment/ai_statement.html
- Student Handbook, pages 186-193
  http://www.soton.ac.uk/studentservices/docs/20078handbook.pdf
- All these documents are also available on-line via SUSSED

Plagiarism -*What it is, and how to avoid it*

What is Plagiarism?

- In some circumstances students may be expected to copy
- Teachers may want students to repeat exactly what is in text books or lecture notes.

At the University of Southampton all work you submit for marking must be your own original creation

Plagiarism is using someone else's work **without indicating** that it is not your own... without **crediting** the original author

The University has produced an official definition and examples which are included in the Student Handbook http://www.soton.ac.uk/studentservices/docs/20078handbook.pdf

Plagiarism is the reproduction or paraphrasing, without acknowledgement, from public or private (i.e.: unpublished) material (including material downloaded from the Internet) attributable to, or which is the intellectual property of, another including the work of students. Plagiarism may be of written and also non-written form and therefore would also include the unacknowledged use of computer programs, mathematical/computer models/algorithms, computer software in all forms, macros, spreadsheets, web pages, databases, mathematical derivations and calculations, designs/models/displays of any sort, diagrams, charts, graphs, tables, drawings, works of art of any sort, fine art pieces or artefacts, digital images, computer aided design drawings, GIS files, photographs, maps, music/composition of any sort, posters, presentations, and tracing*. *(this is not an exhaustive list)

Examples of plagiarism are:

- Including in your own work extracts from another person's work without the use of quotation marks and crediting the source;
- The use of ideas of another person without acknowledgement of the source;
- Paraphrasing or summarising another person's work without acknowledgement;
- Cutting and pasting from electronic sources without explicit acknowledgement of the source or the URL or author, and/or without explicitly marking the pasted text as a quotation;
- Submitting a piece of work entirely as your own when it was produced in collaboration with others, and not declaring that this collaboration has taken place (this is known as 'collusion').
- Submitting appropriated imagery or creative products without indicating the source of the work

How to Avoid Plagiarism

Always acknowledge your sources, this applies to all types of work you complete:

In formal writing we have a convention of using citations (formal acknowledgement of original sources used within written material) which are related to a list of references which appear at the end of the document. In ECS you will most often be asked to use IEEE format citations which uses a number in square brackets to as its reference mark. However be aware that many different formats exist (for example ACM, LNCS, and Harvard). Whichever format you are asked to use you must use it accurately and consistently.

1. Quote any material copied from elsewhere

   • it may be appropriate to paraphrase rather than copy and quote, as discussed below

2. Follow the quotation (or paraphrased material) with a citation such as [3] which clearly identifies an item in your bibliography

3. Put the bibliography at the end of your report

   • this must give bibliographic details such as title, author, and year for each source you have cited

4. You must do this for all sources

Guidance specific to ECS coursework can be found at any time in the Student Handbook see https://secure.ecs.soton.ac.uk/ug/handbook/2007/SectionA07.htm#_Coursework

Cheating, Falsification, Recycling -*Breaches of Academic Integrity*

Along with plagiarism, which has been previously discussed, cheating, falsification and recycling are all considered by the University to constitute breaches of Academic Integrity. Clarifications of what is meant by these terms are presented below. The material is also found in the Student Handbook
http://www.soton.ac.uk/studentservices/docs/20078handbook.pdf

Cheating is any action before, during or after an assessment or examination which seeks to gain unfair advantage or assists another student to do so.

Examples of cheating are:

- Gaining access to or using unauthorised notes or other material relating to an assessment;
- Introducing any information, including electronically stored information into the examination room, (whether belonging to yourself or another person) unless expressly permitted by the examination or programme regulations;
- Communicating during an examination with any person outside the examination room, or with other students within the examination room;
- Copying the work of another student with or without their knowledge or agreement, whether in examinations or in other assessments;
- Allowing another person to impersonate you, or impersonating another person, with the intention of gaining an unfair advantage for yourself or the other person;
- **Ghosting**, that is, submitting as your own work a piece of work produced in whole or part by another person on your behalf, (eg the use of 'ghost writing' services), or deliberately seeking to make available material to another student with the intention that the other student should present the work as his or her own (Note: this does not include the use of an amanuensis in examinations, or legitimate input from University study skills tutors and/or mentors).

Falsification is any attempt to present fictitious or distorted data, evidence, references, experimental results or other material and/or knowingly to make use of such material.

Examples of falsification are:

- Presenting data based on controlled investigations, experiments, surveys or analysis falsely claimed to have been carried out by you;
- The invention of references and/or false claims;
- Including data etc in your work which you know to be false or incorrect, whether or not this has been created by you;
- In connection with programmes leading to a professional qualification, falsely claiming to have completed non-academic requirements such as hours in practice, or to have achieved professional competencies.

Recycling is where a piece of work which has already been used in one context is used again (without declaration) in another context.

Examples of recycling are:

- Re-submitting work which has already been assessed and marked in full or in part for another assessment in the same or in a different course;
- Failure to disclose that a piece of work was submitted for assessment and has been or will be used for other academic purposes;
- Publishing essentially the same piece of work in more than one place, without declaration. In some instances it may be acceptable to use work previously submitted for a written assignment as the basis for an examination answer, or to further expand and develop such work at a higher level – eg developing the ideas formulated in your third year dissertation into a Master's level thesis. Such situations would be governed by the specific regulations of the appropriate programme of study.

There may be other breaches of academic integrity which are not specifically referred to here and some breaches may fall into more than one category.

The material above has been taken from Student Handbook
http://www.soton.ac.uk/studentservices/docs/20078handbook.pdf

Group Work, Collaboration and Collusion -*Where to draw the line*

Group Working

Collaboration can take place formally, when you are specifically asked to work in groups, and informally when you work with fellow students in a study group. We understand the value of students working together, which can provide significant help in learning, and frequently encourage you to set up informal study groups. For that reason, you need to understand the difference between collaboration and collusion. To successfully complete your degree you will need to ensure that collaborations (both formal and informal) are conducted with academic integrity.

Some assignments, labs, and projects are carried out in groups. For small tasks it will be assumed that everyone contributed equally

- if a member of your group is *not* doing their share of the work, you must tell the lecturer

For major pieces of work you will be asked to indicate your contribution and that of others

- keep a record of your contribution (and that of your partners) in your log book

Outside Help

Occasionally you may ask a friend for help. They can go through the material to you, and try to clarify any misunderstandings, but what you submit must be your own work

- you must be able to explain it if asked to do so

If you copy or paraphrase some material from your friend's solution you must declare this

- this is my own work except for *<reference to material which is not your own>* which I have copied from *<name and id of person>*

Similarly if you download code from the Internet

- this is my own code except for *<details of downloaded code>* which I have downloaded from *<details of download source>*

Collaboration or Collusion?

Working with other people, and maintaining your academic integrity is know as *collaboration.* Occasionally when you have worked on a problem together it is difficult to know who should get the credit,

You should declare what you have done

- this is my own work except for *<detail of collaborative work>* which and I developed together with *<details of collaborative partner(s)>*

If you don't declare your collaboration, this is called *collusion*, since it appears that you are not informing anyone marking the work that you are submitting work which is not completely your own. In this case it will be treated as a breach of academic integrity. This matter is discussed in the ECS student handbook:

"*Danger arises when people get so much help that the work ceases to be their own. Drawing a precise line between the kind of collaboration that is acceptable and the kind that is unacceptable is admittedly difficult. Nonetheless, it is possible to establish some clear guidelines.*

If you do not understand the solution you have submitted, you have certainly crossed a line into unacceptable territory. You are not learning, which is the entire point of the work having assignments in the first place. In the School, we reserve the right to ask students to explain the work they have submitted.

If you have "borrowed" from someone else's work to such an extent that you feel a need to "cover up your tracks" by changing variable names or rearranging the order of operations, you are clearly plagiarising according to the definition above. In other academic disciplines, it is common to refer to and build upon the work of others.

The fundamental principle of academic integrity is that whenever you make use of someone's ideas, you should give credit for those ideas in the form of proper citation or acknowledgement. We ask that you do the same in work submitted to Electronics and Computer Science"

ECS Student Handbook
https://secure.ecs.soton.ac.uk/ug/handbook/2007/SectionA07.htm#_Coursework

Quote and Paraphrase -*and avoid Plagiarism*

How to Quote

The easiest and clearest way to identify a quotation is with quote marks "..."

for example
"the other pre-eminent name in British Computing, Maurice Wilkes, arguably contributed rather more than Turing, certainly in practical terms, but is much less prominent in the popular perception" [1]

An alternative is to indent, or display, the quoted material, which is usually in italics

- *The other pre-eminent name in British Computing, Maurice Wilkes, arguably contributed rather more than Turing, certainly in practical terms, but is much less prominent in the popular perception* [1]

In both cases the reference section at the end of the document then provides details of the source of the cited information as follows:

References

[1] Halley, M., *Electronic Brains: Stories from the Dawn of the Computer Age.* Washington DC: Joseph Henry Press, 2005.

How and When to Paraphrase - long quotes

Sometimes using direct quotations can be clumsy or problematic. Copyright law only allows you to copy small amounts of text (one or two lines). Longer quotes require the author to give permission. In such cases you should paraphrase the source by **rewriting the material in your own words**. For example the quote above could be re-written as

- Wilkes, though not as famous as Turing, perhaps made greater practical contribution

How and When to Paraphrase - many quotes

You should also paraphrase to make sure your report flows smoothly and reads well, a sequence of quotations can confuse your reader

Paraphrasing vs. Plagiarism

It could be plagiarism if you

- take too much from one source,
- only replace some words with synonyms, or
- simply swap words or phrases round to make the sentence look different

- Instead you should
- *summarise* the key points from your source
- use your own words and phrases
- comment on and evaluate your source

The examples above have been taken from the University of Southampton Academic Skills Guide.

http://www.academic-skills.soton.ac.uk/integrity/

The next section contains worked examples of quoting and paraphrasing which show in detail ways you can use source texts without breaching academic integrity

Quoting Text -*Worked Example*

Below are two pieces of writing on Web 2.0, the first is an academic paper, the second is text from a book. The are both quoted directly with appropriate citations

Source 1

"The most recent generation of Web applications and Web sites have been considered by some to be fundamentally different from the ones found on the early Web, these have been grouped together under the term Web 2.0, and while the name is arguably misleading (implying a designed version and a discrete evolution) the concepts beneath it provide a valuable insight into the way in which the Web has evolved. The Web 2.0 concept is probably still too intangible for a solid classification, however it can be said that the Web 2.0 approach emphasises interaction, community and openness".

[1] Millard, D. and Ross, M. (2006) Web 2.0: Hypertext by Any Other Name?. In *Proceedings of ACM Conference on Hypertext and Hypermedia 2006*, Odense, Denmark.

Source 2

"Let's close by summarizing what we believe to be the core competencies of Web 2.0 companies:

- Services, not packaged software, with cost-effective scalability
- Control over unique, hard-to-recreate data sources that get richer as more people use them
- Trusting users as co-developers
- Harnessing collective intelligence
- Leveraging the long tail through customer self-service
- Software above the level of a single device
- Lightweight user interfaces, development models, AND business models"

[2] Tim O'Reilly, What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software, Published by the author 09/30/2005, http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html (accessed Oct 2006)

Quoting

A poor student might include the following in their report

Using sources 1 and 2 together

The Web 2.0 concept is probably still too intangible for a solid classification, however it can be said that the Web 2.0 approach emphasises interaction, community and openness. Web 2.0 systems have the following characteristics:

- Services, not packaged software, with cost-effective scalability

- Control over unique, hard-to-recreate data sources that get richer as more people use them
- Trusting users as co-developers
- Harnessing collective intelligence
- Leveraging the long tail through customer self-service
- Software above the level of a single device
- Lightweight user interfaces, development models, AND business models

This is not acceptable and would be considered a breach of academic integrity, it copies the original text and does not acknowledge the sources with any references or citations.

A slightly better attempt using direct quotations might be

"The Web 2.0 concept is probably still too intangible for a solid classification, however it can be said that the Web 2.0 approach emphasises interaction, community and openness." [1] Web 2.0 systems have the following characteristics (taken from [2]):

- Services, not packaged software, with cost-effective scalability
- Control over unique, hard-to-recreate data sources that get richer as more people use them
- Trusting users as co-developers
- Harnessing collective intelligence
- Leveraging the long tail through customer self-service
- Software above the level of a single device
- Lightweight user interfaces, development models, AND business models

[1] Millard, D. and Ross, M. (2006) Web 2.0: Hypertext by Any Other Name?. In Proceedings of ACM Conference on Hypertext and Hypermedia 2006, Odense, Denmark.
[2] Tim O'Reilly, What at Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software, Published by the author 09/30/2005, http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html (accessed Oct 2006)

The example above is a simple re-presentation of two sources which acknowledges the sources through the citations. A better example might have included the list as a table - making it doubly clear that it was not the author's original work. However it still does not convey any of the writer's understanding of the field.

The next section takes you through a worked example of paraphrasing which you can use as a means to enable you to reword the text and add some of your own understandings

Paraphrasing Text -*Worked example*

Paraphrasing is re-presenting information in your own words. In the best examples paraphrasing will synthesize understanding, and present new insights which will assist the reader in their understanding of the topic area.

The example below attempts to paraphrase the original two texts

It is not yet possible to classify Web 2.0, although we can say that Web 2.0 systems do encourage interaction, and they foster communities through participation and open standards. Web 2.0 companies tend to offer services rather than packaged software, they control data sources that get richer as more people use them in order to harness the wisdom of crowds, they leverage the long tail, and have lightweight user interfaces/models and agile business models.

This is a breach of academic integrity. The text differs little from the original source. A few words have been changed, no substantial insight has been provided. Because the original source has not been acknowledged, it will be treated as an example of plagiarism.

The next example rewords the two texts to some extent and acknowledges the sources

Although is not yet possible to classify Web 2.0, we can say that Web 2.0 systems do encourage interaction, and they foster communities through participation and open standards [1]. Web 2.0 companies tend to offer services rather than packaged software, they control data sources that get richer as more people use them in order to harness the wisdom of crowds, they leverage the long tail, and have lightweight user interfaces/models and agile business models [2].

[1] Millard, D. and Ross, M. (2006) Web 2.0: Hypertext by Any Other Name?. In Proceedings of ACM Conference on Hypertext and Hypermedia 2006, Odense, Denmark.

[2] Tim O'Reilly, What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software, Published by the author 09/30/2005, http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html (accessed Oct 2006)

However whilst it does re-present the information it does not offer any additional insights for the reader.

The final example adds a narrative which explains to the reader how the writer understands the two different perspectives Millard and Ross argue that it is not yet possible to fully classify Web 2.0, although they say that Web 2.0 systems do encourage interaction, and foster communities through participation and open standards [1]. O'Reilly does attempt such a classification, but by focusing on the commercial characteristics of Web 2.0. He suggests that Web 2.0 companies tend to offer services rather than packaged software, control data sources that get richer as more people use them in order to harness the wisdom of crowds, leverage the long tail, and have lightweight user interfaces/models and agile business models [2].

[1] Millard, D. and Ross, M. (2006) Web 2.0: Hypertext by Any Other Name?. In Proceedings of ACM Conference on Hypertext and Hypermedia 2006, Odense, Denmark.

[2] Tim O'Reilly, What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software, Published by the author 09/30/2005, http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html (accessed Oct 2006)

The example above provides the writer's perspective as well as explicitly acknowledging the original authors by citing the two sources. Paraphrasing text in an insightful manner requires the writer to reflect. It takes time to write good prose, because it takes time to think about what you are saying and to present other people's work in a new and insightful manner.

The examples above have been used in teaching by Dr Dave Millard from ECS, University of Southampton.

# Figures, Tables, Equations -*further examples and 'Common Knowledge'*

When you quote information which has been previously published elsewhere such as a figure, table, or equation, you can apply the same rules which applied to quoting text. You need to choose between a direct quotation, and reinterpreting the information in a form which is equivalent to paraphrasing. In every case you have to fully acknowledge your sources. Carefully following conventions for labelling figures, tables and equations can assist in this process, but you must also make sure that your sources are cited, and if you are offering a modified form of a diagram you will still need to acknowledge the original author and publication.

The examples below deal with figures, tables and equations in turn.

Figures

It may be that you can reproduce a figure, table or equation directly, *for example*:

Dubey and Crowder developed a three link articulated finger test rig [1] as shown in Figure 1 below

1. Adjustable support with sensor housing
2. Adjustable support plate
3. Finger mechanism housing
4. Finger drive motor
5. Articulated finger
6. Silicon fingertrip
7. The housed slip sensor
8. Optical fiber
9. Aluminum block (slipping object)
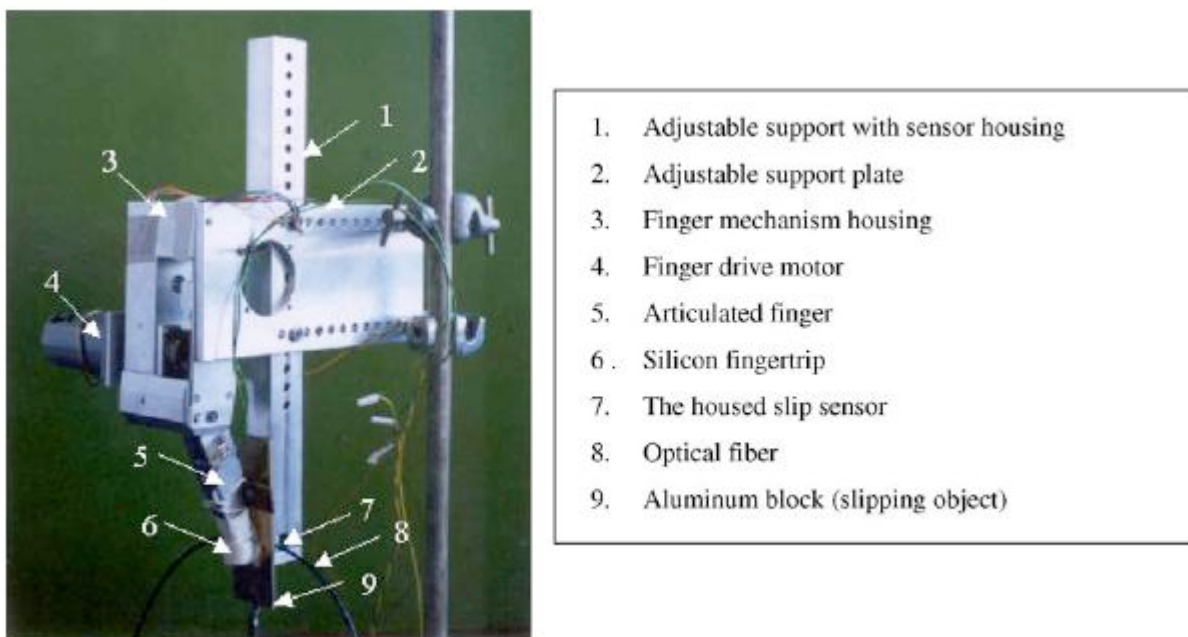
Figure 1. The experimental set-up

References

[1} V.N. Dubey, R.M. Crowder, Grasping and control issues in adaptive end effectors, in: ASME International Design Engineering Technical Conference, DETC2004-57126, Salt Lake City, UT, USA, September 28–October 2, 2004.

You might have redrawn the test rig in diagrammatic form, or have taken a picture of

your own rig which was based on the design by Dubey and Crowder, in those instances you should still acknowledge the original, and ensure that the figure you include is clearly labelled.

The example below shows the difference between referencing an original diagram, and a version of the diagram which has been modified

Figure 1: a UML communication diagram (Lethbridge and Laganiere [5], chapter 8, page 290)
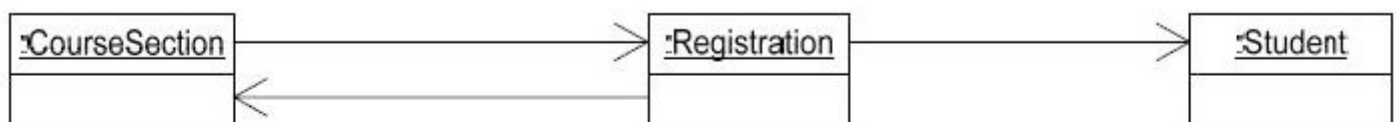
Figure 2: a UML communication diagram (based on one in Lethbridge and Laganiere [5], chapter 8, page 290)

Tables
A table may be reproduced in its original form, or you may change it in some way.

the example below shows a copy of the original table which was presented in a paper, followed by an example of how it might be referenced in a student's report

No. of Nearest Neighbours	Magnitude CCR	Phase×Magnitude CCR
$k = 1$	50 %	80 %
$k = 3$	40 %	90 %

Table 1. Overall classification performance.

Often it is necessary to re-present the information. The example below shows the table redrawn with accompanying text.

Nearest neighbours	Magnitude CCR (%)	Phase Magnitude CCR (%)
k=1	50	80
k=3	40	90

Table 2 Correct Classification Rates found by Cunado et al.

Table 2 above shows the results presented by Cunado et al [6] who examined gait as a biometric via phase weighted magnitude spectra, demonstrating the value of phase as well as frequency content as a practical biometric.

Reference
[1]...
... [6] Cunado, D., Nixon, M., and Carter, J., "Using Gait as a Biometric, Via Phase-Weighted Magnitude Spectra," pp. 95–102, 1997.

Equations
The challenge with quoting equations is to ensure that you weave the meaning and significance of the equation into the narrative of the rest of the report or dissertation. You need quote equations to acknowledge prior work and to enable the reader to return to the original sources. You do not need to cite the source of every equation, some equations will be considered to be 'common knowledge'. Fundamentals of discipline are often considered to be common knowledge - for example Ohms Law.

Common Knowledge
There is no need to quote the sources of information which is considered to be 'common knowledge'. Typically material which is found in the course recommended data book can be considered to be 'common knowledge. Material which is taught to you during the first two years of an undergraduate degree can be considered common knowledge. Material which you are taught in specialist courses during the third year of an undergraduate degree or later will typically not be considered 'common knowledge' and you should cite the original sources accordingly.

Cite and Reference... -*and avoid Plagiarism*

How to Cite

Immediately after each quotation, or piece of paraphrased material, include a *citation tag*
this is a number, year, or other identifier in square brackets [...]

- different styles exist, but you must always use the same style throughout each essay or report
- typically your lecturer will tell you which citation format they require

For example

- "the other pre-eminent name ... in the popular perception" [Halley 2005]
- Wilkes, though not as famous as Turing, perhaps made greater practical contribution [3]

Creating a Bibliography

This is where you list your sources

- Start each item is on a new line
- You may also use a hanging indent for later lines
- Order the list, alphabetically or numerically, according to the style of your citation method

The references below are in alphabetic order:

[Gravell 2006] ...
[Halley 2005] Electronic Brains: Stories from the Dawn of the Computer Age, Halley M, 2005, Joseph Henry Press,
Washington, DC

The same references are now listed in numeric order
[2] ...
[3] Electronic Brains: Stories from the Dawn of the Computer Age, Halley M, 2005, Joseph Henry Press, Washington, DC

Why do we Cite our Sources?

- We are *legally* obliged to respect the author's moral right to be acknowledged as the source
- Citation also supports the scientific process: new results are published, leading to new claims being made, these results and claims may be challenged or they may be supported by further findings.
- Readers need to be able to follow the development of the argument being presented.

- Citing your sources enables the reader to return to original literature. It also gives credit to other authors for work which they have previously carried out. Effectively the citations are part of a process which provides a clear audit trail. Other parts of the audit trail include you providing accurate details of your methods and results (see the tutorial on Falsification)

Material in this section is based on the University of Southampton Academic Skills Site

Citation Guides
See the University's Academic Skills Guide http://www.academic-skills.soton.ac.uk or the Library's Guide to Information Skills http://www.soton.ac.uk/library/infoskills/index.html for further information about proper formats for citations and references, or ask for guidance from your subject librarian. Always make sure you are clear about which citation format you are expected to use.
The University of Toronto Engineering Communications Centre provide a useful online guide to citations in IEEE format http://www.ecf.utoronto.ca/~writing/bbieee-help.html

Plagiarism Detection -*How we detect cases of plagiarism*

Avoiding Plagiarism in ECS

- The concept of plagiarism extends to all sorts of academic work, lab work, design and build, programming and written work

- We have an electronic handin machine (called C-BASS) used for many courseworks
  - https://handin.ecs.soton.ac.uk/

- We make use of programs which check for plagiarism in program code and in written assignments
  - across student groups
  - across externally published work

- When you complete a handin you will be asked to confirm that the work is your own. Make sure you
  - explain any collaborative work you may have done, and
  - acknowledge the use of other people's work such as code, design, graphs and diagrams

Plagiarism Detection Service

- To help us detect breaches of academic integrity, we use automated plagiarism detection systems
- In the last two years, these have detected a small number of cases where there has been a major level of plagiarism
  - and some students have failed their degrees as a result :-(

A Fictional Case Study

An Example Report by Angela Brown

This is a short example to show the importance of using your own words in the reports that you write. Here is an additional sentence with a long and unusual structure in it that will definitely be tracked as a distinctive item by the plagiarism detection software that we use.

This is my own work (signed) Angela Brown.

The Case Study Continued

An Example Report by Cheating Dastard

Another student has copied Angela's report, without any reference to the original work. This is a short example to show the importance of using your own words in the reports that you write. Here is an additional sentence with a long and unusual structure in it

that will definitely be tracked as a distinctive item by the plagiarism detection software that we use. To make the report a little longer, some material has been included from another source off the Internet.

An Example Plagiarism Report

-Overall Similarity Index: 71%

1.38% match (internet, wikipedia)

2.33% match (student papers from 06/16/06)

An Example Report by Cheating Dastard

Another student has copied Angela's report, without any reference to the original work. This is a short example to show the importance of using your own words in the reports that you write. Here is an additional sentence with a long and unusual structure in it that will definitely be tracked as a distinctive item by the plagiarism detection software that we use.

To make the report a little longer, some material has been included from another source off the Internet. Integrity comprises the personal inner sense of "wholeness" deriving from honesty and consistent uprightness of character. The etymology of the word relates it to the Latin adjective integer (whole, complete). Evaluators, of course, usually assess integrity from some point of view, such as that of a given ethical tradition or in the context of an ethical relationship. This is my own work (signed) Cheating Dastard.

Actual Screen Shot

http://www.submit.ac.uk - TurnitinUK - Mozilla Firefox

TurnitinUK Originality Report

An Example Report by Cheating Dastard

Processed on 16-06-06 4:18 PM BST   ID: 372464   Word Count: 151

◄ previous   next ►   print   help
                        save
                        refresh
                        prefs

turnit**in'**UK

Overall Similarity Index: 71%   exclude quoted   exclude bibliography   mode: quickview (classic) report ▼

38% match (internet)
http://en.wikipedia.org/wiki/Integrity

33% match (student papers from 06/16/06)
Submitted to University of Southampton on 2006-06-16

An Example Report by
Another student has copied Angela's report, without any reference to the original work. This is a short example to show the importance of using your own words in the reports that you write. Here is an additional sentence with a long and unusual structure in it that will definitely be tracked as a distinctive item by the plagiarism detection software that we use.
To make the report a little longer, some material has been included from another source off the Internet. Integrity comprises the personal inner sense of "wholeness" deriving from honesty and consistent uprightness of character. The etymology of the word relates it to the Latin adjective integer (whole, complete). Evaluators, of course, usually assess integrity from some point of view, such as that of a given ethical tradition or in the context of an ethical relationship.
This is my own work (signed) Cheating Dastard.

Breaches and Penalties 2 -*Details from University Calendar*

A summary of penalties for breaches of academic integrity are shown below. For full details see University Calendar Section IV Appendix 1
http://www.calendar.soton.ac.uk/sectionIV/part8.html

Stage 1 : Minor Incidents

First recorded incident of:

- Small amount of plagiarism which may be the result of poor academic practice
- Collusion leading to limited similarity between submitted assessment items.

a) Provide feedback and issue a warning to be retained on the student's file. Award a mark appropriate to the work submitted taking account of the fact that not all the work is that of the student.

Stage 2 : Intermediate Incidents

Any repeat incident

- Moderate amount of plagiarism/extensive plagiarism with strong evidence eg: matched text
- Collusion leading to significant similarities between submitted items
- Copying
- Recycling
- Minor breaches of examination regulations, eg: inadvertent use of the wrong type of calculator

(a) Provide feedback and issue a warning to be retained on the student's file. Award a mark appropriate to the work submitted taking account of the fact that not all the work is that of the student.

(b) Require the student to re-submit the same piece of work for a capped mark (should the student refuse the re-submit the work a mark of 0 will be awarded).

(c) Award no marks for the piece of work.

(d) Award a fail grade for the module/unit concerned, with or without the right of resit.

Stage 3 : Major Incident

- Extensive plagiarism
- Serial plagiarism - any
- Ghosting/use of essay bank services
- Impersonation
- Falsification

- Deliberate breaches of examination regulations; eg: unauthorised use of notes in examination rooms

(d) Award a fail grade for the module/unit concerned with or without the right of resit

(e) Failure in the year as a whole

(f) Reduction in degree class

(g) Termination of programme

(h) Deprivation of award*

*Please note that penalty (h) can only be imposed on the authority of Senate.

See University Calendar Section IV Appendix 1
http://www.calendar.soton.ac.uk/sectionIV/part8.html

Glossary -*technical terms used in the tutorial*

Academic Integrity: A person who has academic integrity understands and follows the rules and conventions of academic professional work. This means that they always cite and reference the sources of ideas and facts used in their own work. See the academic skills guide "Referencing your sources" for advice
http://www.studyskills.soton.ac.uk/integrity/index.htm

Boiler-Plating: Like a patch-work essays, boiler-plating refers to a piece of written work made up from a selection of copied phrases and sentences which come from books, journals and websites. They may be joined together with a few sentences by the 'author'. Typically none or only a few of the references are acknowledged. This type of plagiarism is easy to detect and will only gain low grades in any case.

Bibliography/References: A list of all the sources used and cited in a work, presented in alphabetical order of author for ease of reference. It can of course include journal articles, conference papers, websites and other sources as well as books. The precise formatting of the list is determined by the citation style used (e.g. ACM, IEEE, Harvard, LNCS). In some conventions the references are used to identify work which is explicitly cited in the text, while the bibliography acknowledges works which have been used to inform the design and structure of the whole document. For example this may be the case in lab reports where some work will be directly referenced by the report, but you may have used a textbook to help you write the report as a whole.

Cheating: Any activity which a student deliberately uses to gain an unfair advantage. Examples include copying the work of another student, buying essays from the Internet and colluding with other students on an individual assignment.

Citation: A citation is a note in the text, such as (Miller, 2002) which identifies the source of an idea or fact and acts as a link to a more detailed reference in the Bibliography or References section of the work.

Collusion: Collusion occurs when two or more students work together on what is supposed to be an individual assignment. See the guide "When does helping becomes cheating?" for advice on avoiding accidental collusion.
http://www.studyskills.soton.ac.uk/integrity/index.htm

Copying: A form of collusion where a student simply copies or paraphrases another student's work. This type of cheating can be detected fairly easily.

Common knowledge: Facts and ideas that are so widely known that they can be used without including a reference. The problem is knowing what is and isn't "common knowledge". See the section on figures, tables and equations for more details.

Ghosting: submitting as your own work a piece of work produced in whole or part by another person on your behalf, (eg the use of 'ghost writing' services), or deliberately seeking to make available material to another student with the intention that the other student should present the work as his or her own (Note: this does not include the use

of an amanuensis in examinations, or legitimate input from University study skills tutors and/or mentors).

Harvard style: One of a number of 'citation styles' which define exactly how different types of sources should be referenced. You may be asked to work with a variety of citation styles and should always check the coursework specification to be sure you understand what is required. If you are not sure seek clarification from your lecturer.

Paraphrasing: This is simply reworking material into a form of words which explains the ideas contained in a piece of text. In its simplest form copying which 're-writes' a text by re-arranging or substituting words may count as plagiarism if you do not refer to your sources as an acknowledgement. In its best form paraphrasing express ideas in your own words and offers additional insight or understanding.

Patch-work: Patch-work essays are made of paragraphs copied from books, journals and websites, joined together with a few sentences by the 'author'. This type of plagiarism is easy to detect and will only gain low grades in any case.

Plagiarism: Plagiarism is using the work of other people in your own work, for example by copying or paraphrasing their words. You can avoid plagiarism by
a) clearly indicating which ideas and words are not your own,
b) include a correctly formatted reference to acknowledge the source of the material or ideas.
See the academic skills guide "Referencing your sources" for advice:
http://www.studyskills.soton.ac.uk/integrity/index.htm

References/Bibliography: A list of all the sources used and cited in a work, presented in alphabetical order of author for ease of reference. It can of course include journal articles, conference papers, websites and other sources as well as books. The precise formatting of the list is determined by the citation style used (e.g. ACM, IEEE, Harvard, LNCS). In some conventions the references are used to identify work which is explicitly cited in the text, while the bibliography acknowledges works which have been used to inform the design and structure of the whole document. For example this may be the case in lab reports where some work will be directly referenced by the report, but you may have used a textbook to help you write the report as a whole.

Referencing: Referencing means acknowledging (citing) the sources of ideas and facts that you use in your work so that a reader can check those sources and see if they really support the conclusions you made. It is the foundation of academic work, which is why Universities are so concerned with academic integrity and plagiarism.

This Glossary was adapted from the University of Southampton Academic Skills Guide
http://www.academic-skills.soton.ac.uk/integrity/glossary.htm

Conclusion - *Acknowledgements, References and Further Reading*

Please Remember

- Academic Integrity is important
- Breaches include plagiarism, cheating, falsification, and re-cycling
- We use automatic plagiarism detection software to help us identify breaches
- Students have been caught, and some have failed their degree as a result
- Make sure you quote (or paraphrase) and cite all your sources in a clear and standard way

Acknowledgements

In preparing this tutorial we have drawn on a range of sources:

- The basic structure and content of the tutorial is based around the standard ECS presentation which was first developed in 2006 by Andy Gravell, Michael Kraft and Su White.
- Further input has been made by various colleagues in ECS in particular Hugh Davis and Dave Millard.
- The idea for an online tutorial was based on work done originally by Penn State University in the US, and subsequently developed by Geographers in the Dialog+ Project (a collaboration between the four universities: Penn State, Sheffield, Southampton and University of California Santa Barbara)
- We also acknowledge work done by Rochester Institute of Technology
- The University of Southampton Academic Integrity Statement acknowledges work done at
  the University of Kent www.kent.ac.uk/uelt/ai/students/goodpractice.html
  and Edinburgh College of
  Art http://www.eca.ac.uk/foi/files/AcademicMisconduct.pdf
- Some of the test questions were based on material developed by the University of Manitoba as part of their Academic Honesty
  Quiz http://www.cc.umanitoba.ca/student/resource/student_advocacy/academic_ honesty_quiz.shtml

References

University of Southampton Documents/ Web Sites

- Quality Handbook - Academic Integrity Statement
  http://www.soton.ac.uk/quality/assessment/ai_statement.html
- University Calendar (Section IV)
  http://www.calendar.soton.ac.uk/sectionIV/part8a.html
- Student Handbook, pages 186-193
  http://www.soton.ac.uk/studentservices/docs/20078handbook.pdf
- University of Southampton Academic Skills Guides http://www.academic-skills.soton.ac.uk

- University Library http://www.soton.ac.uk/library/infoskills/index.html

ECS Documents and Web Pages

- C-BASS handin machine https://handin.ecs.soton.ac.uk/
- ECS Student Handbook Section 3.1.2 Originality of Work
  https://secure.ecs.soton.ac.uk/ug/handbook/

If you have any comments, feedback or suggested additions please send them to Su White saw@ecs.soton.ac.uk