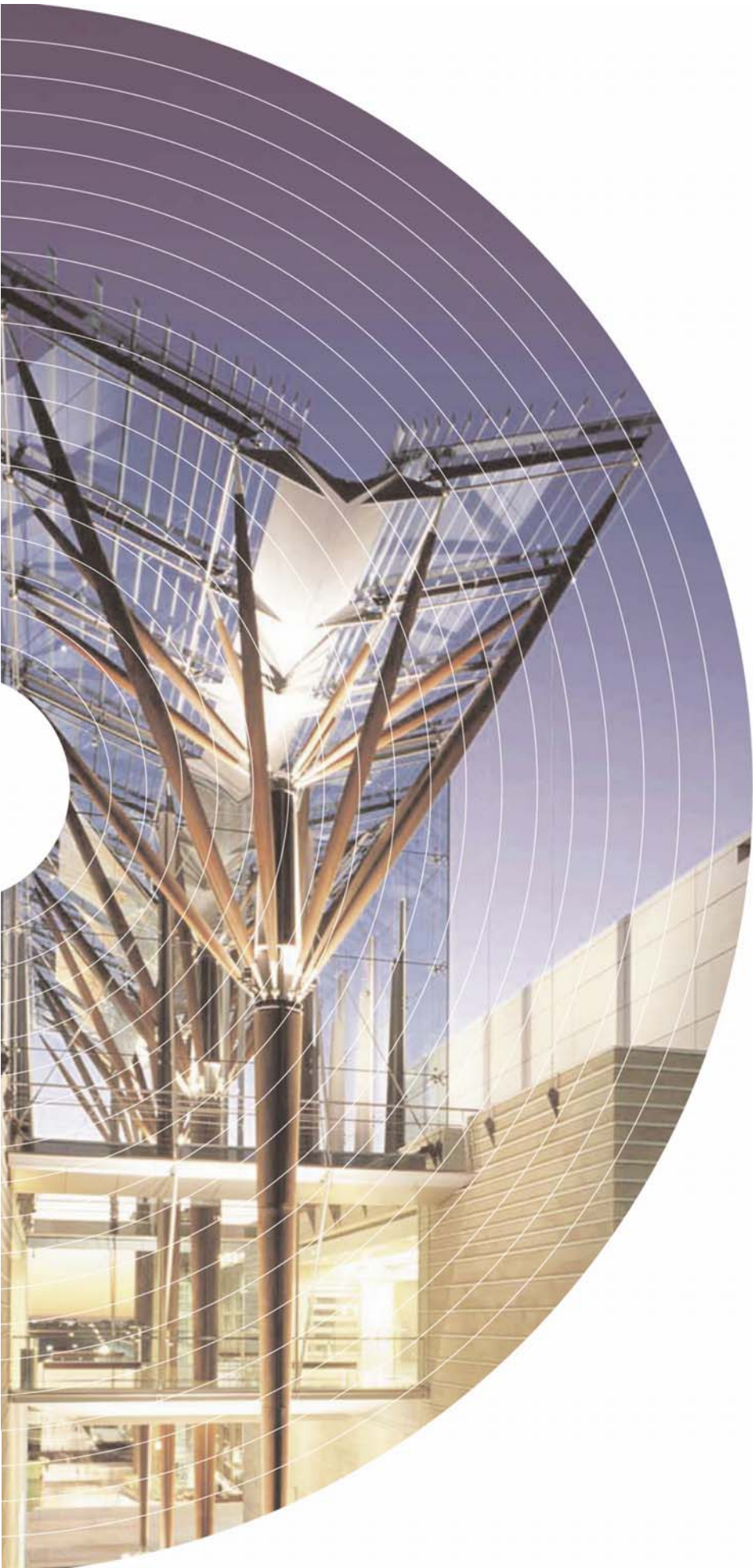


School of
Safety Science

Academic Governance

Revised: March, 2006





School of Safety Science
 Academic Governance document
 Revised March 2006

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1 Introduction

Purpose of this document

This document is intended to give information on several issues of School policy. Students should read and refer to this document as necessary, because it outlines procedures and policies relevant across courses offered by the School of Safety Science.

Programs and Courses

The School of Safety Science is the responsible academic unit for the administration of the approved programs and courses in Safety Science. Under the Australian Qualifications Framework, qualifications issued for participants who complete courses at universities in Australia are considered qualifications of the higher education sector and correspond to level 7 and above.

Course delivery

The School is responsible for ensuring that courses will be taught by competent individuals with appropriate academic or professional expertise. School policy requires that courses be evaluated periodically.

Course assessment

The School is responsible for ensuring that courses will be assessed by competent individuals with appropriate academic or professional expertise. Records of assessments of course participants will be subject to School of Safety Science and UNSW requirements for privacy and security. The full UNSW Assessment policy can be viewed at <http://my.unsw.edu.au/student/academiclife/assessment/AssessmentPolicyIndex.html>

Attendance modes

Some confusion has surrounded the terms used to describe attendance and non-attendance, and the situations where this refers to distance study, and courses that require off-campus activities (e.g., site visits). The following matrix has been added to course profiles to help clarify these issues.

Study Mode	Time		Attendance Type	
	Over Session	Short course	Attendance	Non-attendance
On campus				
Off campus				
Web only				

Attendance on campus means that students come onto the campus for classes.

Attendance off campus means that students do not come onto the campus for classes, but do attend another location for classes.

Non-attendance means that students do not attend lectures, but study with course notes and/or WebCT support.

2 Learning and Teaching philosophy

The School of Safety Science is committed to excellence in learning and teaching. Accordingly, courses are taught in ways that are intended not only to provide information and skills, but also to engage and challenge students. Since many of our postgraduate students are already working, we aim to use the experience that our students already have, to enrich the learning experience for all. The opportunity to practice and develop analytical, synthetic and critical thinking skills is important and this and other course learning outcomes are supported through the multiple teaching modes and assessment practices.

3 Assessment policy

School Policy

The University of New South Wales (and the School of Safety Science) has a policy of appropriate assessment of students, guidelines on submission of materials for assessment, and a process for dealing with suspected cases of academic misconduct.

Principles of Course Assessment

The key principles of course assessment are outlined below.

- **Currency:** Course assessment of course participants will be that outlined in the most recent copy of the course notes and associated materials. While earlier editions may have some validity to course assessment, there is an expectation that course participants will be studying the latest edition of materials for the course.
- **Validity:** The assessment of course participants will match the learning outcomes/performance criteria for the course (that is, it assesses what it claims to assess). Knowledge and skills will be assessed in an integrated way through activities such as continuous assessment, essays, project work, short tests, examinations, group tasks, presentations and so on.
- **Fairness:** Course assessment procedures are designed to be equitable and relevant to the course objectives and content.
- **Competency Level:** Where relevant, course assessment procedures will recognise the knowledge/competence/skill/expertise level of course participants.
- **Clarity:** The knowledge skills and competencies being assessed in a particular task will be clearly articulated.
- **Flexibility:** Course assessment contains at least two types of assessment, each aspect allowing a different approach to the recognition of knowledge, competency or skills.
- **Sufficiency:** Course assessment will be carried in such a way that will provide enough evidence to judge the competence of the course participants.
- **Authenticity:** Course assessment will be carried out in a way that provides enough evidence that the work provided for assessment is that of the course participant.
- **Reliability:** Assessment of all aspects of the course will be conducted by people approved by UNSW (usually the course coordinator) to ensure consistency of outcomes. Where 2 or more people are involved in course assessment, procedures to ensure consistency (e.g., marking criteria, comparing distributions etc.) will be used. Moreover, the quality control of assessment processes for the course forms part of the operational procedures of the UNSW School of Safety Science for all its courses.

4 Guidelines on Submission of Materials for Course Assessment

The student should consult the Course profile for each course they are enrolled in for details of the scope, style, content, format, type and deadlines of material that must be submitted for course assessment. Further, as a general guideline:

- i. Students must use the most recent edition of the course notes and related materials for preparation of materials submitted for course assessment.
- ii. Materials submitted for course assessment must be substantially the student's own work.
- iii. Except where collaborative work is explicitly allowed, a student must not give their materials submitted for course assessment to a fellow student.
- iv. A student must not obtain so much help from a fellow student that materials submitted for course assessment resembles theirs.
- v. Student's must not copy from another person or source, either with or without their knowledge or consent.
- vi. Where a student uses sources from the literature, the source and author must be acknowledged by an appropriate citation (both in the body of the document, at the place of the citation, and a complete reference in the reference list).
- vii. Except where there is substantial difference in content, a student must not provide the same material as that provided for different assessment tasks (for example, similar material for different courses).
- viii. Assignments should not be sent by fax or email unless permission is given by the course authority.
- viii. For non-attendance students, assignments should be submitted to: The Assignments Coordinator, School of Safety Science, UNSW NSW 2052.
- x. Assignments should be submitted by the due date. Where this is not possible, the course authority should be contacted about reasons for the delay **prior to the day of the deadline** and in certain circumstances a new due date may be negotiated without penalty. Failure to meeting the new deadline will result in the penalties in point xi applying once the deadline has passed.
- xi. In the case of an un-negotiated extension, there will be a late penalty of 5 marks per week, or part thereof, for which the assignment is late, to a maximum of 20 marks lost or a course mark of 50% is reached.
- xii. Students must complete all mandatory components of the course assessment in order to pass the course (carefully check the course profile for all matters relating to course administration). For example, if there are 3 assessments in a course, one of which is worth 60% and the other two are worth 20% each, the two smaller assignments must be completed in order to pass the course (even though passing the larger assignment would result in a final mark of above 50%). In such cases, where all assessment components are not completed, but the aggregate mark is greater than 50%, students will be awarded the grade of UF (Unsatisfactory Fail). In some courses there is a requirement that a pass must be achieved in one or more components of the assessment.
- xiii. Special consideration. Students should see the UNSW policy on special consideration for assessments and examinations that have been missed due to illness misadventure.

This is available at: <https://my.unsw.edu.au/student/atoz/SpecialConsideration.html>
Where assessments are missed as a result of illness or misadventure for which no warning was reasonably possible, a written application for special consideration should be submitted with supporting evidence, such as a medical certificate.

5 Grading of Assessments

Where assessments are graded, the following marks are employed:

85-100	High Distinction: Outstanding performance
75-84	Distinction: Superior Performance
65-74	Credit: Good performance
50-64	Pass: Acceptable performance
49	and under Fail

Where assessments are not graded, the following marks are employed:

SY: Satisfactory performance

US: Unsatisfactory performance

See the UNSW postgraduate and undergraduate handbooks for further details on other assessment codes

Policy on Resubmission and Additional Assessment

Where a student fails an assessment task, following negotiation with the course coordinator, they may be allowed to resubmit the task, however a maximum grade of 50% will be awarded for the re-assessment. A date for resubmission must be negotiated with the course authority and be adhered to.

Students who pass an assessment task may not resubmit to improve their grade.

Students who achieve an overall course mark between 40% and 50% may be allowed to undertake additional assessment rather than retake the course. This may take the form of a new assessment task or resubmission of an assessment task or tasks which did not achieve a pass mark.

In circumstances where an assessment task is totally misunderstood and is returned to the student without grading, resubmission is permitted, however the maximum grade of 50% will apply.

This policy applies to all courses except where otherwise stated in the course profile.

Students are advised to discuss assessment tasks with the course coordinator if they are in doubt about requirements or how to undertake the assignment.

General guidance on University assessment can also be obtained from the Learning Centre www.lc.unsw.edu.au.

6 Academic Misconduct

Students must read and comply with the University's policies on plagiarism and other forms of academic misconduct (see <https://my.unsw.edu.au/student/academiclife/assessment/AcademicMisconductStudentMisconduct.html>), and copies in the course notes and course profiles.

Such guidelines are not designed to isolate the student from other students, but to ensure that marks are a fair reflection of each student's work. The student is encouraged to discuss assignment problems and possible solutions with fellow students, but must independently compose the assignment in its final form. If in doubt, err on the side of caution, or consult the course authority.

Note that plagiarism checking may not be conducted until the end of the teaching session, when the course authority or lecturer has the time to do it.

Penalties for Student Misconduct

If a student contravenes these guidelines, they may be liable to a penalty and remedial action. This penalty may take the form of reduced marks for the assignment, or zero marks for the assignment, or failing the course, depending on the severity of the offence. Names of students who plagiarise are entered onto the Central Plagiarism Register.

Students found guilty of plagiarism or academic misconduct in more than one assignment at one time are regarded as having committed multiple offences under the UNSW discipline rules, and thus may find themselves subject to expulsion from the University.

Further Advice on Student Misconduct is available at:

<https://my.unsw.edu.au/student/academiclife/assessment/AcademicMisconductStudentMisconduct.html>

7 Appeals

Both the School of Safety Science and UNSW have procedures that allow any student to bring any aspect of course management to its attention. This may include such things as the actions of a student, activities within a course, or assessment of course participants. These procedures are completely confidential and a student may use them without penalty.

If appropriate, matters dealing with course administration should first be brought to the attention of the course coordinator. For example, if a student is concerned about the mark that they have received for an assignment, and believes that they should have been awarded a higher mark, the matter should be discussed with the course coordinator. Re-marking of assignments is not an automatic process, and any possible action will be considered by the course coordinator, following discussions with the student.

If issues cannot be resolved with the course coordinator a student may appeal to the Program Authority or Head of School.

The School of Safety Science has a grievance officer, who may be contacted for any problems with the School's programs and courses. The School grievance officer is Dr Amanda Hayes.

The Head of School may also be contacted regarding problems with any matter of School business. The Head of School is Prof Jean Cross.

UNSW also has a range of grievance and academic appeal provisions, which can be found in the UNSW Assessment policy, at the Student gateway website at: http://www.studentadmin.unsw.edu.au/academiclife/assessment/assessment_policy.shtml.

8 Occupational Health and Safety Issues

The School of Safety Science recognises and accepts its obligations under the NSW Occupational Health and Safety Act (2000) and associated legislation, and is committed to providing a safe and healthy working environment for staff, students and visitors to School premises and to ensure that these areas are safe from hazards and risks. The School's values put safety first every time and stress the importance of caring for the environment in all that we do. It is the aim of the School to develop a preventive and proactive safety culture for students through (where appropriate) the use of a participatory approach involving staff, students and visitors.

OHS Resources at UNSW

The UNSW Risk Management Unit (RMU) is a useful resource for information about UNSW Safety policies and programs. The RMU website contains information on many of the safety issues that may affect staff and students (for example, OHS, biosafety, chemicals, radiation, dangerous goods). Relevant web pages include:

UNSW OHS Policy: <http://www.riskman.unsw.edu.au/ohs/UNSW%20OHS%20POLICY%20v6%20April%202001.pdf>

UNSW OHS Responsibility and Accountability:
<http://www.riskman.unsw.edu.au/ohs/UNSW%20OHS%20Accountability.pdf>

UNSW Consultation Structures: <http://www.riskman.unsw.edu.au/ohs/consultation.shtml>

UNSW Hazard or Incident Reporting:
http://www.riskman.unsw.edu.au/ohs/HAZARDREPORT_form.pdf

UNSW Hazardous Substances Policy: <http://www.riskman.unsw.edu.au/ohs/Hazardous%20substances%20policy.pdf>

OHS in the School of Safety Science

The responsibility for ensuring the health, safety and welfare of students rests with the University and the School, although students have a responsibility to ensure that their acts or omissions do not cause harm to themselves or others.

The School is divided into "spaces" and the day to day management of School activities is coordinated through "Space Owners". Any OHS or other issues related to these spaces should be referred to the relevant space owner. <Link to Space Owners>

The School believes that all accidents are preventable, and that safety, health and environmental performance can always be improved.

The following points provide a general framework about general safe behaviour that is consistent with the School's OHS Policy:

- All staff, students and visitors have a duty of care to ensure their own health and safety.

- All staff, students and visitors must act in accordance with all general safety directions and all specific safety rules in areas of high risk (for example, laboratories).
- Accidents or hazards should be reported to Supervisors or Space Owners as soon as possible.
- Behaviour that endangers the health and safety of others or the environment is unacceptable and will not be tolerated.
- UNSW is a no smoking employer, and smoking is not permitted in any School building.
- The School does not permit the use of alcohol or illegal drugs or allow intoxicated persons on site.
- Workplace hazards and risks are identifiable and therefore risks can be eliminated or controlled. These should be reported to a staff member.
- All activities that use School facilities or resources and for which a potential risk exists must be assessed using the School's One Plus One Plus Risk Assessment system.
- The use of all hazardous substances must be reviewed prior to use. This must include at least a review of the Material Safety Data Sheet (MSDS) for the chemical. The School's Chemicals Register is located in the CSAT laboratory.
- Where a risk cannot be eliminated, it must be controlled in accordance with Clause 5 of the NSW OHS Regulation 2001 using the hierarchy of controls.
- Where a risk can only be rendered safe through the use of controls, these must be specified and used. Selection of control must be made using the hierarchy of controls.
- Where they exist, Safe Working Procedures must be followed.
- No person should operate any plant or equipment until they have been trained in its safe use, and until they have been assessed as competent in its use.
- No hazardous substance should be used without reference to the material safety data sheet.
- If personal protective equipment (PPE) is required to be used as a risk control, it must be used properly and in all specified situations. Such PPE must comply with relevant Australian Standards.
- In any emergency, please follow directions given by Staff.

9 Responsibilities and Expectations

Student expectations

Students enrol in University courses to learn, gain competence and be accredited for that learning and competence. Broadly, students expect quality and professionalism in the provision of amenities and services, access to suitably qualified teachers and learning support, access to flexibility and convenience in program arrangements and course delivery, value for money and high academic standards. Essentially, students want a University experience that is a valuable educational experience.

Although there are a number of inequalities of power in a University context, the position of students with regard to the University staff that teach and assess them embodies a structural relationship arising from the teacher-student relationship. The decisions made by University staff as teachers are often made unilaterally, and students are dependent on University staff for the achievement of their educational aspirations and can be vulnerable to their power.

Students have an expectation that University staff with obligations in teaching and assessment will discharge those obligations conscientiously. For example, staff will

- ◆ keep up to date with professional, academic and pedagogical developments in their field;
- ◆ teach and assess students diligently and equitably;
- ◆ respond to the diversity of student needs within reasonable limits and not exploit their vulnerabilities;
- ◆ pay due attention to student feedback; and
- ◆ be aware of university regulations (for example, harrasment, equity and conflict of interest) and those of any relevant professional body.

In terms of marking of assignments, students should expect a reasonable amount of written comments, rather than just a mark. In addition, Staff will endeavour to return marked assignments (that have been submitted by the due date) within 3-4 weeks of the due date, and to return email communication within 3-4 working days.

Staff expectations

A student's perception of course materials, how they will be taught and how they will be assessed can play a powerful role in what they get out of their studies. While the student has expectations on how staff at the University will treat them, staff at the University (and indeed the School) also have expectations on how students should behave.

Study: The UNSW Academic Board has recommended that a normal workload for students is 25-30 hours per unit of credit per session, including lecture time. So, for a 6 UOC course, that equates to 150-180 hours per session. This means 10-12 hours per week (including attendance at lectures and tutorials) for 7 weeks for a 3 uoc course or 14 weeks for a 6 UOC course. Therefore, the School expects that the student will diligently study the course materials and where relevant, attend classes. It is not reasonable for any student to get good grades if they do not meet these simple guidelines on study time.

Good time management is essential to success at university. Planning your time allows you to spread your work over a session, avoid a “log jam” of work, and cope with study stress. Many deadlines for university work occur at the same time, and unless you plan ahead, you'll find it impossible to manage. To meet the demands of study you need to spread your workload over a session. Work out what needs to be done and when. Work out how to use your available time as efficiently as possible.

Behaviour: Staff expect that students will not plagiarise or act in other ways that constitute academic misconduct. Please refer to the guidelines on the “Plagiarism” link on the School website, and UNSW’s academic misconduct information available at

<https://my.unsw.edu.au/student/academiclife/assessment/AcademicMisconductStudentMisconduct.html>

Discrimination/harassment: The University is committed to providing a safe study and work environment that is fair, equitable, has respect for social and cultural diversity, and is free from unlawful discrimination, harassment and vilification. Whilst both University policy and anti-discrimination legislation covers a range of important grounds of discrimination (see <http://www.infonet.unsw.edu.au/poldoc/equity.htm>), any behaviour that does not respect the rights of others, or that harasses, vilifies or discriminates against others, including threatening or violent behaviour, is unacceptable at UNSW and serious action will be taken against those responsible.

Knowledge/Skills development: The School hopes that the main skills being developed in students enrolled in School of Safety Science courses are: (i) acquisition of knowledge, competency and expertise; (ii) capabilities in analysis; (iii) capabilities in synthesis; and (iv) critical thinking (self directed, self disciplined and self correcting thinking). These need high order thought processes (see below).

Skills in Science: Analysis, Synthesis and Critical Thinking

Science is first and foremost is the study of things in the universe to create or refine human knowledge using a set of logical and empirical analytical methods which provide for the systematic observation of phenomena in order to understand them. This may be from the very small (such as the quantum theory of matter) to the very large (such as galaxy formation). For example, the scientific discipline called safety science consists of a substantial body of knowledge relating to the impacts that organisational risks have on worker health, organisational systems and infrastructure, and the environment. Science creates or refines knowledge based on evidence from observations, experimentation, logical deduction, and rational thought.

The process of development of knowledge through rational evidence is called empiricism, a central scientific concept. When a scientific idea is proposed, it can be tested through empirical methods consisting of observations and experiments, and formalised into theory using induction (extrapolating ideas or principles from a set of observations), deduction (interpolating ideas or principles from a set of observations) and conceptual models.

The terms *analysis* and *synthesis* are used within most modern scientific disciplines to denote similar investigative procedures. In general, *analysis* is defined as the procedure by which an intellectual or substantial whole is broken down into its constituent parts or components.

Synthesis is defined as the opposite procedure: take a collection of facts or observations and derive principles or conclusions from them in order to form a coherent whole.

Analysis

Analysis is the activity of breaking an observation or theory down into simpler concepts in order to understand it. Analysis is as essential to science as it is to all rational enterprises. It would be impossible, for instance, to describe mathematically the motion of a vehicle involved in an accident without separating human behaviour, vehicle design and velocity. Only after this analysis is it possible to formulate a suitable theory for the accident.

This reductionist approach allows the scientist to better understand the components of the phenomena being studied.

Synthesis

On the other hand, synthesis takes a set of observations that may appear unrelated, and makes inferences about the inter-relationships between them so as to better understand them. Like analysis, synthesis is essential to science. An example of synthesis is the relationship between exposure to a workplace risk and the subsequent development of injury or disease.

As scientific methods, analysis and synthesis nearly always go hand in hand; invariably complementing one another. Every synthesis is built upon the results of a preceding analysis, and every analysis requires a subsequent synthesis in order to verify and correct its results. Each has its own special properties which determine the type and degree of empirical knowledge that is available. In this context, to regard one method as being inherently better than the other is meaningless.

Thinking

Of course, everybody thinks, it is human nature to do so. However, much untrained thinking, if left to itself, can be partial, biased, uninformed or subjectively prejudiced. These habits will impair the ability of a scientist to think clearly, logically, and objectively.

The elements of thought include:

- ◆ The aim or objectives of the thinking;
- ◆ Information, such as observations, data, facts and experiences;
- ◆ Concepts, such as definitions, axioms, principles, theories or models;
- ◆ Frame of reference of thought, including point(s) of view, assumptions, presupposing ideas and underlying conditions;
- ◆ Inference and interpretation, such as implications, consequences, conclusions and solutions;

Egocentric Thinking

Egocentric thinking results from the inadequate or inappropriate consideration of all factors in a particular problem. Egocentric thinkers are not usually explicitly aware of the errors in which they might use or interpret data, recognise egocentric assumptions, or be aware of their self-serving perspective. It is quite human for a person to uncritically accept their self-centered intuitive perceptions to determine what to believe or reject. Some of the commonly used psychological viewpoints in human thinking include:

- ◆ It's true because I believe it (egocentrism);
- ◆ It's true because we believe it (sociocentrism);

- ◆ It's true because I want to believe it (wish fulfillment);
- ◆ Its true because I have always believed it (self validation);
- ◆ It's true because it is in my self-interest to believe it (selfishness).

These flawed thinking processes assist in self deception and make for poor intellectual standards.

Critical Thinking

The elements of critical thinking are:

- ◆ Identifying issues, situations or problems;
- ◆ Formulating questions about the issues, situations or problems clearly and precisely;
- ◆ Gathering and interpreting relevant information;
- ◆ Assessing the gathered information for how it may fit into current knowledge or measured against standards or other relevant standards;
- ◆ Being open-minded about alternative possibilities, recognising, if necessary, the assumptions, implications and consequences of other ways of thinking;
- ◆ Communicating the findings of analysis and synthesis effectively;
- ◆ Participating with others in developing solutions to the identified issues, situations or problems.

Critical thinking is therefore the process by which a thinker improves the quality of their thinking by taking charge of the structures inherent in thinking and imposing intellectual precision on them. This requires stringent intellectual standards of excellence and independence, and a commitment to overcome subjectivity, egocentrism and bias.

These standards should be applied to thinking about an issue, situation or problem, and include:

- ◆ Clarity
- ◆ Logic
- ◆ Accuracy
- ◆ Precision
- ◆ Relevance
- ◆ Simplicity or complexity

Other factors, such as significance of the problem and intellectual humility about the fairness in which the problem is being considered are also important.

Critical thinkers routinely apply stringent intellectual standards to the elements of reasoning in order to develop objective intellectual processes. The steps to the development of critical thinking are:

The **unreflective** thinker

I am unaware of problems in my thinking



The **self aware** thinker

I am have become aware of problems
in my thinking but am unsure what to do



The **developing** thinker

I am trying to improve my thinking
but without regular practice



The **practicing** thinker

I am improving my thinking with regular practice



The **advanced** thinker

I have improved my thinking and advance my
skills through self awareness and reflection



The **master** thinker

Disciplined thinking habits are second nature