



Cambridge-MIT Exchange - CME

Teaching & Learning at Cambridge for MIT students

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Note that you may be familiar, from your prior MIT experiences, with some of the material on study skills and, in particular, that presented on pages 16 to 23. Nonetheless, it is included here as it may be useful in the context of studying in a different university.

Please email suggestions on how to improve this booklet to: rob.wallach@msm.cam.ac.uk

Introduction

Welcome to the University of Cambridge and the start of your CME Undergraduate Exchange year here – a continuation of your previous studies at MIT. This booklet is designed to introduce you to some aspects of academic life in Cambridge as the inevitable differences between the two universities mean that there will be new challenges ahead. Each section gives advice about studying at university; some of which may seem familiar while, hopefully, some new ideas will help you use your time here effectively and enjoyably. Your Director of Studies, your Tutor, your supervisors, fellow students, and past CME students (including those in other years) are among those who will supplement the advice and information given here. Do talk with them!

The aim of providing advice is to help you:

- get the most out of your time here and enjoy the challenges of academic study;
- develop and appreciate new approaches to learning;
- take pride in activities undertaken and done well – both academic and extra-curriculum;
- enjoy your university experience and your time in the UK.

Some of the terms used above, such as **supervisors, Director of Studies or Tutor**, may not be familiar to you, but are explained in this booklet and also are included in the glossary (page 24). Further background is available in your own College's booklet "*Information for Students*" (or equivalent document) which describes the structure of your College and provides information on practical aspects of living here. The intention is that both documents will give perspective on life as a student in your College and Cambridge. The University website (www.cam.ac.uk) is a further good source of information especially as it provides access to all department, faculty and college websites. Both this booklet (at http://mit.edu/cmi/ue/academics/Study_Guide.pdf) and also your own College's "*Information for Students*" are accessible on web-sites.

Enjoy your time here, including tackling successfully the challenges that inevitably arise when moving somewhere new and starting something different.

Academic year and Terms

The **academic year** begins on 1st October, and is divided into three **Terms**, Michaelmas, Lent and Easter (there also is an additional research term during the summer when undergraduates generally are not present). Formal teaching, e.g. lectures, practicals and supervisions, takes place only during a shorter period called **Full Term** during which it is essential that you remain in Cambridge. The Michaelmas and Lent Full Terms are each 60 days while the Easter Full Term is 53 days; each Full Term begins on a Tuesday and ends on a Friday. Lectures begin on the first Thursday of Full Term and end on the final Wednesday. **The dates for Full Term 2009-2010 are:**

Michaelmas Term	6 October - 4 December 2009	<i>(so aim to leave 12 Dec)</i>
Lent Term	12 January - 12 March 2010	<i>(so aim to leave 20 March)</i>
Easter Term	20 April - 11 June 2010	<i>(May week ends 18 June)</i>

- **We ask that you plan to arrive at Cambridge on Wednesday, 30 September, to begin the special orientation program for MIT students.**
- **It is sensible to stay in Cambridge for *at least* a week after the ends of the Michaelmas and Lent Full terms to consolidate your academic work. Hence the above recommended dates in italics – you may benefit from staying longer, especially at Easter to prepare for exams!**

A different approach to learning?

By way of providing an understanding to undergraduate life here in Cambridge, the following points may highlight some of the differences to your previous two years at MIT.

FREEDOM: Depending on your subject, you may find yourself with many hours in the week free for your own private study, research and recreation. The amount of such time at your disposal varies between subjects (typically less for science, medicine and engineering than in the humanities), and depends as well on your year of study. Enjoy the freedom of deciding how to employ this time to best advantage and constructively. You will be expected to do your own reading and research in relation to the work set for you in supervisions, classes and practicals (labs). This will require regular use of your Faculty library, other departmental libraries, and almost certainly the University Library and/or College Library.

BREADTH: As you will be aware, a high percentage of the marks at the end of your year here will be assessed by the Tripos examinations and hence they clearly are very important (see separate section – page 12). Your success in the Tripos will depend, in part, on how well you have worked steadily and consistently during the year. It also will depend on the breadth of your knowledge, and so **do** read around the subject and **don't** confine yourself simply to what you think is “relevant” to the exams. As you know, education is more than a simple matter of passing exams, and, as at MIT, is much broader than that. Do go on learning for the sake of intellectual curiosity as well!

TAKING RESPONSIBILITY: Some courses in Cambridge may appear to be less self-contained and/or structured than modules in MIT, and also may depend on material presented in previous years and/or parallel courses. This initially can be frustrating, particularly for those who thrive better in a more structured environment. However, respond to this challenge by **actively seeking** the help and advice that you need by talking to other students, supervisors, Directors of Studies DoS and Tutors. [See the Senior Tutors' website¹ for more information about the roles of the latter three.] Additional supervisions also can be arranged – ask your supervisors or contact your DoS in your College for advice.

ARGUMENT: In many subjects (particularly in the arts and humanities), there are few answers which are straightforwardly right or wrong, and personal interpretation is crucial to examination success. The right answer is the one you can justify academically. You will be expected to develop and sustain arguments both verbally and on paper, using evidence from lectures, supervisions, and from your own research to support the case you develop. Be prepared to debate issues raised in your supervisions, classes and also less formally with friends, and try to participate in and also help lead, or steer, discussions. The more you are prepared to do this, the more you will benefit from supervisions and seminars.

EXAMINATIONS: There is a separate section (page 12) that describes the Tripos examination arrangements and how to prepare for them. You do need to ensure that your examination entries are correct and this is explained in more detail in the Examinations section.

SUPERVISIONS: See the separate section (page 8) on supervisions which are arranged by your College Director of Studies or, in some third or fourth year subjects, through your Department.

¹ The Tutor www.admin.cam.ac.uk/committee/seniortutors/guidance/tutor.html
Guidance for Supervisors www.admin.cam.ac.uk/committee/seniortutors/guidance/supervisor.html
Guidelines (Directors of Studies) www.admin.cam.ac.uk/committee/seniortutors/guidance/dos.html

Motivation

The main problems that you are likely to encounter here in yourself or others are related to the inevitable comparisons with your previous experiences and the opportunities at MIT. The various familiar external factors which have been supportive of you to date – including teacher and parental pressure, as well as the different approaches to syllabi and time-tabling – will have to be reviewed and, in some cases, adjusted in order to enjoy and benefit from the different approaches here. In particular, the feedback is different to that at MIT and is largely through the supervision system during the academic year. The nature of this, but only if you are unfortunate, can raise issues such as uncertainty about progress. To gain perspective on this, talk to other students, including those who have been here as exchange students. Although the work prepared for supervisions is often challenging, the reduced formal assessment, plus lack of regular graded problem sets and tests, can be translated into more freedom which, hopefully, you will grow to appreciate and use constructively. More information on this topic and also advice on study skills are provided in pamphlets produced by the Cambridge University Students' Union (CUSU) and the University Counselling Service (see Bibliography at end); they are well worth reading.

The pressure that builds up during the first two intense teaching terms can be significant. We all, students and staff alike, get tired and feel hassled, especially as these two terms enter their fifth and sixth weeks (so called “fifth week blues” – see Glossary, page 24). We all know what it is like to feel our motivation slacken, to yield to the temptation to put off something until the last possible moment. Hence it is essential to work consistently from the start of term in order to minimize the chance of getting behind. Regularly plan and review how you are using time, stick to schedules and meet deadlines. Try not to get behind since it requires real determination and effort to get on top of your work properly again. However, if you do get behind, talk to others (supervisors, Tutor, Director of Studies and friends) to gain perspective on what should be tackled straight away and what might be put aside to return to in the next vacation. Note that the vacations are not only a chance to have a holiday but are used by Cambridge students to get on top of the material presented during the previous term and to really attempt to fully understand the concepts introduced. This is essential in both vacations in order to realise your potential in the end of year Tripos examinations. It is difficult to do well in these examinations without having worked during a good part of each vacation.

A very few students (in fact, extremely few compared with other universities) leave Cambridge because they lack practical motivation, cannot cope without it and did not seek appropriate advice early enough. It is therefore a matter of the greatest importance if you find yourself struggling that you do share this with others such as your Director of Studies, a supervisor, one of the Tutors in your College, or friends. Gaining perspective and being supported in this way does help and almost certainly will help you get back on top of things. So also keep in touch with CME Exchange staff – at MIT or Cambridge, or both!

Finally, if you find yourself feeling down halfway through the academic year, it might well be that it's simply the weather (grey and damp rather than the Boston cold)! You can at least tell yourself that you're not alone. But do share these feelings so they do not dominate your time or take over completely. We all get fed up at times!

Managing your time

Now you're at Cambridge, much more of your time is your own compared with following courses at MIT. So how are you going to use each day and, on longer time-scales, are there particular objectives that you wish to set yourself for a given term or for the year? Think carefully about how you are going to strike the right balance between work and relaxation. The extra freedom you have can be double-edged!

Some advantages:

1. YOU HAVE MUCH MORE FREEDOM TO WORK TO YOUR OWN TIMETABLE AND TO EXPLORE IN DEPTH THE AREAS OF YOUR WORK THAT INTEREST YOU MOST (although clearly this is subject dependent).
 - You can fit your work into different time slots during different parts of the day, and may have to do so in order to attend lectures, supervisions or participate in sports or other recreational activities.
 - You can get ahead with work in one area and then turn your attention to another.
 - You can do a sustained piece of work (a question or problem sheet, an essay, planning a project) over several days or even a week, and return to it several times.
2. YOU CAN USE YOUR FREEDOM CREATIVELY
 - Getting on with your work means that you will have more time to explore and develop those aspects of it which most interest you.
 - You can plan your time to take part in diverse extra-curriculum activities (and you should do so!).
3. YOU CAN PREPARE YOURSELF PROPERLY FOR THE NEXT STEP
 - You will also find that you can face your exams with much more confidence.
 - Good habits developed now will bear fruit throughout your academic career and in the world of work beyond it.

Some disadvantages:

1. YOU MIGHT PROCRASTINATE
 - In a long day you will feel as though work can be put off and put off until much later. It is so easy to waste an hour between lectures chatting over coffee, when you could actually find and read a whole article or prepare an essay framework in that time.
 - There's danger of doing everything in a rush and doing the minimum just to get by. If that happens you won't get much satisfaction from the area of study you have chosen or make much progress in it. From a grade standpoint, remember it is Tripos examinations that count, not supervisions. Trying to slide by supervisions doesn't do anything except frustrate the supervisor and make you feel like you've wasted your time. It is far better to postpone and prepare well for a supervision as you will get more out of it and also it is better preparation for the Tripos exams.
 - You might be tempted to hand in work just before or even at a supervision. As well as not doing you justice, this is unreasonable for your supervisor who would be completely justified in refusing to look at a piece of work turned in at such short notice. Many supervisors (but regrettably not all) go to considerable trouble to return work with helpful comments, so they should object!
2. YOU MIGHT LEAVE YOUR WORK UNTIL LATE AT NIGHT
 - Most people (although not all) work best during the day and not after eleven o'clock at night.
 - The pace of life here is demanding. Would you function properly in lectures, supervisions, and other activities if you are tired? Tiredness does become more of an issue as term goes on.
 - Late nights can obey the law of diminishing returns: the later and more often you work, the slower work progresses.

3. YOU MIGHT SKIMP ON PLANNING

- The illusion of lots of free time can prevent appropriate planning. This can mean that you do not have the time to take part in recreational activities that you would like to, or to spend on your work in order to reach a standard with which you are happy.

How to use time well:

Structuring your time

Students who are well-organised can find time to do extra-curricular activities while also being successful in their academic studies. They combine their work with other interests and hobbies, and so enjoy a rounded and full undergraduate experience. Such students have, by necessity, to develop efficient means of managing their time and, most importantly, using it constructively.

1. USE YOUR TIME EFFECTIVELY

- Tasks will often need to be broken down into different stages, e.g. doing background reading and research, then absorbing what you have read and asking questions about it, then planning, writing, and checking the finished piece of work.
- Make good use of the pockets of time which occur during each day, e.g. a break between lectures, the time after a supervision, a couple of hours after dinner before going out to meet friends. We all can achieve a great deal in forty minutes of concentrated work!
- Most of us find that it is better to set ourselves a realistic goal and use a shorter period of time productively, than to set aside hours of time without achieving very much.

2. DEVELOP A WEEKLY PLAN

- Be aware of the shape of your week, and plan for it (being ready to adjust a plan as term progresses).
- Review these patterns of work from time to time during the term to make sure that you are sticking to your earlier resolutions. Compare what you intended to do with what you actually did.
- Think ahead about how to use each weekend as these days for most (although not for all medics, scientists and engineers) are relatively free and so can provide space to keep up with work and extra-curriculum activities. If Saturday is busy, how much can be done on Sunday?
- Be prepared to be flexible and alter your plans consciously if the need arises rather than let events just take over.

3. ALWAYS MEET DEADLINES

- Remember that once you get behind with one piece of work, you usually start to skimp on the time that needs to be allocated to the next.
- It is preferable to meet a deadline, even by handing in a piece of work that is not as complete as you would have wished, rather than get behind.
- Your supervisors also will have allocated time to look at your work so meeting deadlines is not just for your convenience but may affect how others can respond to your needs.

4. WORK OUT HOW TO APPROACH EACH SUBJECT

- You may need to work differently for each of your separate papers or subjects. Some disciplines set several short sharp tasks each week (learning vocabulary for example); others will give the whole of a week's work time to produce a single essay or project. You need to take this into account when you plan your weekly schedule.

Supervisions

Supervisions are small-group teaching sessions, usually of one-hour duration each week and often in groups of two to four students, although the precise arrangements will depend on your subject, the year of study and, most importantly, you! Students can have up to three or four supervisions each week although this depends on the range of papers or subjects studied. Supervisions allow your weekly work to be reviewed, provide a time when you can discuss your own learning needs and give individual support and attention. You will be expected to submit written work, set in advance by the supervisor, which may be examples or question sheets distributed in lectures, essays or preparation of selected reading. The aim of supervisions is to ensure that you understand basic principles and can apply knowledge appropriately. They also can extend the subject beyond the formal requirements of a particular lecture course thereby allowing you to develop at your own pace or to pursue particular interests in your subjects.

Supervisions are *your* time to develop understanding and to facilitate learning of your subject in a manner that is focussed by your supervisor on *your* individual needs. The Oxbridge system of supervisions is rightly a highly appreciated and valued method of teaching. In a few subjects, there are still one-to-one supervisions, and the privilege of being taught in this way by a renowned figure in one's field is something special. Usually, however, a supervision involves a supervisor (who may be a graduate student) and from two to four students. Whether you are being supervised one-to-one or in a small group, it is important that you contribute in terms of input and preparation, are forthcoming and willing to converse while also allowing others to contribute to discussions.

The College appoints a **Director of Studies, DoS**, for each subject. This is usually a Fellow of your College but may be a Fellow of another college. Having discussed with you your interests and longer term plans, your DoS will advise you initially on which papers you should study, taking those interests and your wishes into consideration. You should receive advice on which lectures to attend. In some subjects there is less flexibility in paper-choice, especially in the first and second year courses in Cambridge. You are likely to be able to specialise more if you are taking third or fourth year papers – and in some cases (especially some HASS subjects), you may also be able to choose to write a dissertation rather than take an exam.

It is the Director of Studies responsibility to find **supervisors** to teach each paper which you have chosen to take. However, in the final years, especially in the sciences, medicine and engineering, supervisions may be arranged by the relevant department or faculty. This is to ensure that more specialised papers are handled by those who know the subjects well. Supervisors can be chosen from throughout the University and you may find yourself going to other colleges for supervisions – to the best people your Director of Studies or organiser in your Department can find in each particular subject. Hence your supervisors may be Fellows of your own College, Fellows of other colleges, post-doctoral researchers (individuals who have completed a Ph.D. degree and now are employed on research contracts) or post-graduate students (who are studying for Masters or Ph.D. degrees). This is advantageous in that it gives some variety in the people who teach you and allows you to experience the teaching of individuals who may hold very different academic viewpoints. Do initiate contact with your DoS if you want to discuss anything about your academic programme.

Usually supervisors are assigned to students. Do not try to schedule all of your supervisions (or labs and any other work) only with other MIT students because Cambridge students will have different insights as well as knowledge into the workings of your Cambridge department. Finally, if you need extra supervisions, ask your supervisor directly. It may be that you will then have to ask your Director of Studies in your College since payment is arranged through Colleges. **If you meet any difficulties, e-mail your subject coordinator in Cambridge or contact the CME Office directly.**

Reasonable expectations of supervisions.

- Each supervision in a group should ideally be held regularly, e.g., at the same time each week or every two weeks in an agreed location. Variations from this pattern should be by prior arrangement between the supervisor and supervisees.
- Supervisors should make it clear how much work they expect and how long each piece of work should be (if they do not, ask them!).
- The supervisor should try to take into consideration how much work you are being set by other supervisors and tailor the amount of work set accordingly (negotiate this as necessary since supervisors will not be aware of your overall work load).
- A plan of study for the term should be discussed with each student, making clear the objectives. If a pre-term reading list is given, the supervisor should say how much of it should read (do not assume that you have to read everything on such a list).
- Supervisors should advise students which lectures might be useful to attend; later, they should follow this up by asking their students about the lectures they have attended. Their advice supplements the recommendations and expectations of Directors of Study.
- Reading lists for supervisions or classes should be discussed by the supervisor who should indicate why each book has been chosen.
- Supervisors should give reasonable *advance* notice by post or e-mail of any cancellation of a supervision or change in time.
- Work handed in before the supervision should be commented upon in detail. If comments are oral, then they should be as detailed as written ones.
- Work should always be returned quickly to students.
- If the supervision is shared, equal time and encouragement should be given to each student to speak. Equally, supervisees should try neither to dominate a group supervision nor, conversely, to rely on others to do all the talking.
- The supervisor should put each piece of work in its intellectual context, although not neglecting to indicate how each piece of work might be related to examination demands. Likewise, the supervisee must try to appreciate and respond to the academic interest of the subject they have chosen and not focus on examinations alone.
- Supervisors should inform students in detail about the examinations they will be taking.
- Students should be told how they are doing; comments on work should be so phrased as to help students to gauge their progress in mastering new topics or concepts and, eventually, in relation to the examinations. Students, in turn, should accept constructive criticism and try to act upon it.
- Supervisors should be neither bullying nor hectoring, nor should they be meaninglessly encouraging or diffident.
- Supervisors should be reasonably easily contactable by telephone or by e-mail: they should let students know when they are going away during term-time if their absence affects their supervision schedule or if they are going away shortly before or during Tripos examinations.
- A supervisor (in consultation with the Director of Studies) should provide remedial tuition when a student is struggling, or help that student to find such tuition.

Your College is very keen to monitor the performance of its supervisors. If you feel that a supervisor is falling short in any of the above or in any other way, then tell your Director of Studies and Tutor. The College will then discuss with you what action would seem appropriate (in an extreme case, your supervisor can be changed). The College normally will not take action without your cooperation, and should not do so without your agreement.

Your share of responsibilities for supervisions.

- Always let the supervisor know in advance and with reasonable notice, say 24 hours, if you are unable to attend a supervision; you will have to pay for the supervision if you do not.
- Turn up to supervisions on time.
- Complete and hand in your work on time.
- Prepare for supervisions by thinking through what topics or issues you wish to discuss or obtain help on (and sometimes emailing this information to your supervisor beforehand will allow the supervision time to be used more effectively in meeting your needs). Review what material has been covered (in lectures, reading, essays or questions sheets) in the time since last meeting and consider whether or not you want to discuss aspects of this material.
- Tell your supervisor if you think you have too much work.
- Tell your supervisor if you have any personal problems which are making it difficult for you to work (if you do not want to share this with your supervisor, tell your Tutor, your Director of Studies or Tutor).
- Don't be diffident - be prepared to argue your point (if you aren't prepared to, work out why - discuss this with your supervisor or Tutor).
- Tell your supervisor what you think about the work you have done.
- Be forthcoming and engage with what is happening. The best students are unashamedly enthusiastic about their chosen subject. Talk generally about your subject as well as on the specifics of your work. As far as supervisors are concerned, there is nothing worse than a silent supervisee. Most prefer to be challenged appropriately and given a run for their money!
- Tell your supervisor if you think you are struggling (especially if they do not seem aware of this).
- Respond appropriately and effectively to criticisms of your work.
- Where appropriate, work out how each piece of work could be used towards examinations, remembering that the essays you have written and/or assignments (including question sheets) completed will be your extremely useful aids when it comes to revision.

Your Director of Studies will work to support your relationships with your supervisors and so ensure your continued satisfaction with academic study. This includes giving you supervisors' reports (normally at the end of each term), listening to and acting upon any recommendations, complaints and comments about supervisors you might have. Your Director of Studies is one of the people to whom you should speak if you are having serious problems with any aspect of your life in College. For these reasons, he or she will be contactable during term-time or will have let you know if away for any period. If you find that you are not able to speak to your Director of Studies when necessary, or if they are not meeting your needs, then speak to your Tutor or Senior Tutor in your College.

Supervision reports and CamCORS.

Termly supervision reports are generally prepared and submitted electronically by your supervisors using the CamCORS web-based software². In many Colleges and generally after you have met with your Director of Studies at the end of each term, these reports will also be available to you through CamCORS (for which you will be registered by your College and so enquire at your Tutorial Office if you have any questions about, or difficulties in accessing, CamCORS). Note that not all Colleges have the same arrangements and so you will have to ask in your own College.

Supervision reports will be shared with MIT as part of our learning agreement, but they are not used

² see Guidance for Supervisors www.admin.cam.ac.uk/committee/seniortutors/guidance/supervisor.html

for, nor contribute in any way to, the formal Cambridge examination system.

Practicals (labs) & project work

Labs in Cambridge generally are known as *Practicals*. As you will be aware from your MIT experience, practical work is an essential component of many science, medical and engineering courses although is not restricted to subjects in these disciplines, e.g. architects in their studio work will deal with similar issues. It has many different forms which include:

- experiments that are well-established and illustrate particular points covered in lectures;
- projects that are research-based and so may be highly original and innovative;
- fieldwork away from the University;
- examples classes in which problems are set to reinforce and develop concepts introduced in lectures.

The practical work may be continuously assessed, with marks being included with those from the examinations at the end of the academic year to give your overall grade in the subject or, in the case of medics, leading to qualification for national MB requirements. Clearly, the precise details will vary across different subjects and also within different years of study. Full information for your own subjects will be given to you by your Director of Studies and also the relevant faculty or department (and details almost certainly will be on their websites which can be found through the University website www.cam.ac.uk).

Practicals fulfil several roles: one is to illustrate topics presented in lectures, a second is to allow you to develop experimental skills, while a third is to broaden your understanding of the subject e.g. by introducing new concepts. Hence, it generally is essential to attend all practical sessions (which you book at the beginning of term - your Director of Studies will give information about this). These are at particular times each week, chosen by you to fit in with the rest of your timetable. The practical classes typically may vary from short (2-4 hour) experiments in the first year to substantial experiments or research projects in the final year which may continue over a number of days or even for an entire term. The various experiments have been devised to be completed during the allotted time although there may not be time to complete writing up your account of the work during the session. Whether this is essential will depend on the nature and purpose of the experiment, and this will become evident to you as you do the work. Your supervisor also can give advice and will also be able to answer questions that arise as a consequence of doing practical work. In addition, for many subjects, there will be a Head of Class and also demonstrators present during the practical sessions to explain the aim of the session and to help you as needed.

Most of the approaches presented in the other sections of this booklet are applicable and relevant to practicals and project work.

Note the precise requirements and arrangements for different departments will be vary. Taking engineering as an example, engineering students schedule their own practicals or labs throughout each term. In engineering, each practical session typically requires 2 hours in-lab time and then additional write-up time. There also are "mark-up sessions" which are associated with each practical and at which a marker reads your write-up and may question you if anything is unclear.

See also the various on-line advice provided by Departments, e.g.

www.eng.cam.ac.uk/teaching/teachoff/ReportWritingGuide.pdf

www.msm.cam.ac.uk/Teaching/course-information/partii-matsci/prac_reports.php

www.msm.cam.ac.uk/Teaching/course-information/partiii-matsci/prac_reports.php

Examinations

The assessment of courses in Cambridge is primarily by examinations held towards the end of the academic year rather than by credit gained by continuous assessment throughout the year or by assessments at the end of each term. While some credit may be gained in certain subjects from the marking of compulsory practicals (lab) reports and similar work submitted during the year, the marks allotted tend to be a small percentage of the final course mark. You will be told just how much credit is given for such work at your departmental inductions at the start of the year. Hence the examinations are crucial in the Cambridge system.

The key to a good result in Cambridge is steady work throughout the year, with consolidation of courses and knowledge during the Christmas and Easter vacations, and **not** by cramming shortly before the examinations! As often is the case, it is necessary to understand something before trying to remember it, and this understanding should be worked at throughout the year.

The Tripos System

The assessment in Cambridge is primarily by the Tripos examinations, the majority (**but not all**) of which are held during a three-week period after the end of the lecture courses in the Easter Term, i.e. commencing in late May. The timetable is published annually each April as “Orders of Examinations” in a special number of the Reporter (www.admin.cam.ac.uk/reporter).

Note: third-year Engineers start examinations at the start of the Easter Term, i.e. late April.

The name Tripos is historical. According to the Oxford English Dictionary:

A bachelor of arts appointed to dispute, in a humorous or satirical style, with the candidates for degrees at ‘Commencement’ (corresponding to the TERRÆ FILIUS at Oxford): so called from the three-legged stool on which he sat.

Examination entries and changing exam entries during the academic year

You will have received advice about course selection while still at MIT and prior to arriving in Cambridge. Further advice will be available both through your Director of Studies in your College and in your department (in which there is an MIT course coordinator).

When instructed by your College in late October, you will need to register for the Tripos examinations using the **CamSIS on-line system** www.camsis.cam.ac.uk/cam-only (and this is accessed using your Cambridge computer service identification CRSID). You subsequently will be asked to verify your entry, possibly on several occasions. **It is essential that you do so in order to ensure that you are entered for the correct papers.** You may wish to check in your department whether you will be doing entire papers or only some parts of a paper; this may be especially relevant for a few HASS subjects (and, again, do seek advice including from the CME Office, if not sure). Note that Engineering Students may also be asked to register for courses via the web on the Engineering Department’s database known as *COMET* (Cambridge Online Management of Engineering Teaching) which handles module choices and related information for third and fourth year Engineering undergraduates. Further details about *COMET* will be given to you by the Engineering Department, including the need to keep your module selection up to date.

If you want to change courses or papers at any stage during the year, it is essential that you discuss this fully with your Director of Studies and then ensure that your College’s Tutorial Office is informed (in writing via email). Please also inform the CME offices – see title page for contact details. If an Engineer, also send a copy of the email to the Department’s Teaching Office to ensure that your module selection recorded on *COMET* also is up-dated.

Structure of papers

It is essential to ensure that you are familiar with the styles of all papers for which you are entered (and they may well differ even within the same department). Check the number of questions to be answered and also the expected length of time per question (which can vary for questions in different sections even on the same paper), as well as the time allowed for completion of the entire paper. Find out whether or not there is an additional short reading period (e.g. 10 minutes in some engineering examinations) at the start of the examination and prior to being allowed to start writing answers.

Use of past papers

This is regarded as essential preparation and awareness early in the academic year of the types of questions is very helpful. Papers from past years are available on-line from faculty websites, in libraries and, in some cases, as booklets from departments. Do check that the past papers are still applicable since courses can change over the years (and have done so recently in Engineering). In practice, it is seldom worthwhile going back more than about five or six years.

When familiar with a course, and in order to get a feel for what examinations here are like, try doing a past paper in a continuous stint, timed to be equivalent to that of the examination itself. It will seem quite different from doing an equivalent number of questions at separate times. Ask your supervisors to look at and give you feedback on how to improve your answers. It is not only important whether or not a question is correctly answered but also whether you used the time well and so presented your answer in an appropriate way to gain maximum credit

Planning your revision time

We all revise and prepare in different ways so what follows in this and the next section is merely to provide some ideas. What is non-controversial is that understanding of materials should be undertaken throughout the academic year and not left to a period just before the examinations. The terms are intense and most students need and use the vacations to review the topics presented in the preceding term and to ensure they understand the material covered. Attempting examination questions from early on in the academic year can help you gain experience not only of the subject matter but also the approaches needed to answer questions successfully in your own subjects.

The Easter vacation is used by students to prepare for the exams which follow in the Easter term. A break from work for a week or so during this period can be beneficial to get a rest from intense academic studies but do use a substantial part of the vacation for studying.

Revising

Do become fully familiar with and knowledgeable about the syllabus for the course, what actually was covered in the lectures, the structure of examination papers and the variety/distribution of questions on each paper. This will help you decide what topics are important to cover prior to the exams and so will help to structure and focus your revision plans. In the Humanities (and so relevant to HASS papers), the precise lecture content may be slightly less important than topics identified from the course syllabus, past questions and discussions with your supervisors; your past essays and notes may have a greater role to play in revision of such subjects.

In addition to practising timed questions and ensuring your supervisor provides feedback on these (see Use of Past Papers above), you can also practise by doing plans for answers since that allows you to attempt a greater range of questions. Such outlines should be brief – a quick plan that might take about three or four minutes so that it is equivalent to the time that you might spend in an examination preparing how you would answer a particular question.

Continued...

Planning answers may be an exercise you wish to include in supervisions, with the agreement of your supervision partners. Alternatively, you can do so informally over coffee. Either approach is beneficial in that you will see how others approach questions and plan answers. But do remember that it is not a competition to make either of you feel superior – use the time to work cooperatively together and learn from each other.

Preparation for the examinations

Find out, e.g. from your department's teaching office, just what can be taken into each examination, e.g. University approved calculators (rather than any model) which need to be purchased and approved well before the examination period starts. It also is sensible to use such a calculator as part of your overall revision so that you are thoroughly familiar and comfortable with its operation.

Check out too what is provided, e.g. data books/sheets. If the latter are provided, become thoroughly conversant with their contents well beforehand since it is very frustrating to end an examination only to find the information you desperately required to attempt an answer was actually contained in such a data book!

You will receive a letter before the examinations listing your exam entries, your exam number and the precise locations of where the papers are to be taken. Check with your Tutorial Office if this has not arrived two weeks before your first exam. Ensure you know where and when each exam is to be held (locations may vary). Do not just look up a location on a map but actually go there to ensure you really do know where it is, how long it takes to get there, and also, where the relevant entrance is if it is a large building.

In the examination

Start by reading the exam paper all the way through, and thinking about which questions you might want to do. The examination may with a short period (10 minutes) for reading after which the invigilator tells you that you can commence writing (this is the case for engineering third-year modules but may not apply to other examinations).

If there is a question that looks as if something is incorrect (e.g. part of an equation is missing), particularly strange or if sufficient information does not appear to have been given, an examiner is present for the first half hour or so and also can be contacted subsequently by the invigilator. The examiner can be asked to confirm whether or not there has been a mistake; you are not penalised for asking but do not do so frivolously!

Once you have identified the questions that you wish to attempt, start planning and then writing answers. Decide the order you wish to attempt questions and the time you can spend on each answer – leaving some time uncommitted for checking your work just before the end of the exam and/or for unexpected contingencies. Stick to the allotted time for each answer.

You have unlimited spare paper, so use it for a few minutes per question to plan your answers or to jot down rough notes. Then start writing.

Think about the presentation of your answers so that it is clear how you are structuring them. Headings can help, as can bullet points in simply factual answers or if you are running out of time. [Check out the use of bullet points with your supervisors prior to the examinations since the acceptance of this approach can vary across different subjects.]

Write legibly! If an examiner cannot read what you have written, or struggles to do so, you are unlikely to receive the credit that might be given to you had your writing been clearer. You can cross out sentences or even sections without being penalised – just make it clear.

Results

The results are emailed individually Cambridge students as well as being posted on boards outside the Senate House on dates which are published in the Reporter (www.admin.cam.ac.uk/reporter) in the Easter Term and which also can be obtained from your College Tutorial Office. The date for a given subject is typically one to three weeks after the end of the examinations for that subject.

The classes or grades used are 1st (top grade), 2:1 (upper second), 2:2 (lower second) or 3rd. However, your results may not be emailed or included with those posted on boards outside the Senate House if you are not following a conventional, full course here (which is the case for many MIT students who also may be undertaking HASS requirements). Do not be concerned as your College will be provided with your marks on each paper in due course although this may take about a week longer (again, the dates are provided in advance to College Tutorial Offices). You will not be given the breakdown of marks for each question on a paper.

No attempt is being made to convert class or the marks obtained into MIT grades. The two educational and assessment approaches are sufficiently different to make such a conversion difficult and, in some instances, invidious. The amount of credit you will be given by MIT for the courses you are talking here should already be known to you; if not known, consult the MIT Faculty in which are intending to major or the CME Offices. An appropriate transcript will be sent to MIT at the end of the academic year.

Stress and illness

The examination period, and the build up to it, can be very stressful and some Cambridge students may get quite worked up! Do not get yourself in such a state! Talk to friends and be aware of how to relax. There also are excellent guides, available on line, from the University Counselling Service (see section "Further Reading" at end of this booklet) on stress as well as a work-related series:

Concentration Coping with exams Procrastination Workblock

If you are really ill (rather than just not 100 % well) on the day of an examination, contact your College's Tutorial Office prior to the start of the examination who then will give you advice and also inform the relevant examination office. Regrettably there is no mechanism in Cambridge to take examinations at times other than those set. In some case of illness, it may be possible to delay the start of your examination by a few hours (occasionally even overnight) and, in such an instance, you would be kept in isolation in your College and then take the examination in a room in College.

If you are ill and cannot take the examination, a report on your work over the year from your Director of Studies together with supervision reports would be used by your MIT Faculty to determine the credit you would receive at MIT.

Reading and listening

During the year here, you are going to encounter a large amount of new material which you must gather, understand and use.

The key principle

The same principle applies for both reading and listening; the more active engagement you bring to the task, the more value you derive from it. Active engagement means more than paying attention while you read or listen. It means asking questions of the material, understanding it by linking it with what you already know, spotting the main ideas and the supporting evidence, evaluating these, taking notes, and committing the outline of the material to memory. This is work, of course, but engaging your mind in this way (even if you are just sitting quietly while you do it) makes studying more interesting, more enjoyable and *much* more valuable.

The three-step approach

1. Understand your **purpose** for reading or listening, otherwise you are likely to do it in a casual, unfocused way.
2. Choose a **method** that suits you and which will keep your mind active.
3. After you have finished, **review** how successful your method was by testing yourself.

Methods of reading

You need to choose a method which will suit the material, your purposes for reading it, and your own preferred way of learning.

- **skim-read** a text to evaluate its strengths and limitations and its usefulness for your purposes. Look at the blurb on the back, at the contents page and at the introduction. Read the chapter summaries. Assess how recent the publication is and the authority of the writer.
- **scan** the relevant sections of a text to find the specific information you need.
- when **reading to study**, use a method like SQ3R (see next page) which will help you to concentrate while you read a text, to understand it and to remember the key points afterwards.

Methods of listening

Keep your mind active and enquiring while you listen. Overcome the temptation to switch off by using a few simple methods:

- listen for the main ideas, the key words and phrases and the supporting evidence. **Note them.** If you are taking notes from an unstructured discussion, the best way to capture the key points might be a free form of notemaking, such as 'pattern' or spider notes - page 13.
- ask questions in your own mind such as 'Do I agree?', 'What are the counter-arguments?', 'What follows from this idea?' and 'What else does this relate to that I know already?'
- if you do not understand something, ask. (Don't be shy. If you don't understand, it is more than likely that others do not either and they will be grateful to you for doing so!)
- as with reading, review your listening notes within twenty-four hours of making them.

How SQ3R works

Survey. First survey some of the works assigned. This means looking over the whole assignment to get an overview *before* you actually choose, and start to read, any one book or article. To start with, try to choose books or articles which either look more introductory, or which set up conflicting positions on the topic.

1. Check the title first to get an idea of what the material is about.
2. Pay attention to the headings and subheadings. They can help you get an overall picture of the author's plans.
3. Check for pictures, graphs, and other illustrative material which can also help.
4. Quickly read any headnotes, introductory paragraphs, and summary section. They can also give you a better overview.

Question. This is the crucial stage in personalising the assignment. Once you've surveyed a sample of the texts assigned (chosen as intelligently as you can), take a sheet of notepaper and jot down questions that you want answered on the topic that you are going to read (and then write) about. What might the author be able to tell you about the topic that you don't already know, or couldn't guess? What are you curious about here? Sometimes it helps to turn the headings and subheadings into questions.

Read. Now you are ready actually to read the works assigned.

1. Read the introductory paragraphs carefully.
2. Add to your list of questions if you need to.
3. Skim the less important points (but only if you *know* they are less important.)
4. Add difficult words to your question sheet so that you can verify the meanings later. Consciously build your vocabulary and *use* new words.
5. Keep asking yourself, 'what is the author's main point here?'
6. Make notes of the main points and supporting evidence.

Review. After you have completed the reading of any one text, review your notes. Ask: what was the author's purpose? What were the chief points? What was the overall plan of the argument? Commit these key ideas to memory.

Recite. One of the best ways of understanding anything is to tell it to someone else in your own words. At this final stage, try out your answers to the questions, either by writing them down from memory or by explaining them to a friend. Making a summary of the main points is also a powerful learning method. This technique helps you to engage with the material you are reading in an enquiring way, and it helps you to understand and to remember new information as you read.

Note-making

The main forms of note-making

- **Annotating a text:**

The following methods should only be used on texts that belong to you! (Defacement of library books is anti-social and also is treated seriously – you would be expected to replace the books.)

Highlighting/underlining: better than passive reading, but since it requires a minimum of attention it can become casual. It should not be used to defer an attempt to grapple seriously with the material. To be valuable it must be highly selective.

Personal coding: examples might be: underlining main points and supporting evidence in various colours; circling new words; joining related ideas; numbering a sequence of ideas in the margin; putting a marginal asterisk next to the key points, etc.

Comments in margins: making notes alongside the text, for example of questions you would like answered, rephrasing of obscure ideas, headings, definitions of new words, etc. This obviously requires a more active attention to understanding the material than merely underlining or coding it.

- **Note taking from a text, a talk or a lecture:**

Selective noting: note only specific information that is needed for your immediate purpose, e.g. writing an essay, from a presentation that has a wider scope that suits your present need. This is not to say that you should not also note other points that you find interesting or stimulating, but you may wish to keep these separate.

Outlining: note the structure and key points of the material. This is a highly effective kind of notemaking, but useful only if the original material is organised into a clear structure.

Summarising: summarising requires you to distinguish the main points, to understand the ideas before you rephrase them, to write concisely and to organise ideas coherently. Hence, once made, summaries can be valuable for reviewing a topic. Summaries can be made of both structured and unstructured material.

Any form of notemaking is better than none and each of us has to develop our own approach, which itself may vary in different situations or times of the year. The method you choose will be valuable in proportion to how much it makes you think about, understand and select what you are noting.

Practical hint: buy enough paper, ringbinders and dividers to store your notes neatly in sections. However, take only what you need to a lecture to avoid losing all your work to wind or rain!

Layout of notes

Select the layout which best suits the material you are noting as well as your purposes for studying it. Whichever layout you choose, make sure that your notes are **clearly arranged, well spaced and legible**.

Linear notes

This is the most familiar form and has the advantage of being neat and clear. Avoid writing down too much, and especially just transcribing what you read or hear; this quickly becomes an automatic process which fails to engage your mind. You are using noting as a way of making sense of the material, not just to record it. Try putting it in your own words.

It is essential to consider layout so that you have a clear arrangement and use space effectively – do not cramp the notes. Numbered headings, sub-headings and colour all help to allow key points to stand out. Avoid blocks of continuous prose which make the overview harder to take in. Avoid unnecessary words or explanations that obscure key points.

Pattern notes (spider diagrams)

The brevity of such notes (which are in diagram form, using arrows etc.) make them unsuitable for noting detailed information, but they are excellent for providing an overview of a topic. They require that you select a key word, around which you build a pattern which shows how related ideas interconnect. They are particularly suited to capturing an unstructured discussion in a kind of semantic 'map'.

Noting and condensing your notes

Once you have made notes from the books you have read or the lectures you have attended, you will find that you will need to order them for the purposes of essay writing. This usually involves coding your own notes. People have different ways of doing this and it is good to develop your own methods which suit you. Highlighting or personal marginal coding are the most common forms.

Some students condense or reduce their lecture notes into a much briefer form for revision and examination purposes. The use of index cards for this is a recognised way of doing this, and such cards are suited to sorting information according to topics and for memorising key points, chosen economically.

Essay and project work

Writing an essay or doing an extended project is regarded as a central skill for most undergraduate courses. Many science courses also include such work especially after the second year but the many of the ideas in this section apply equally to work such as question sheets which are used frequently in the sciences.

- It *makes* you review the material you have recently learnt, which helps to fix it in your memory.
- It requires that you *use* the material in a new form, which involves understanding it.
- It involves you in practising several important skills including gathering and selecting information, asking questions, reaching conclusions, developing ideas and sorting them into a coherent line of argument.
- It forces you to learn to refine and sharpen your ideas by expressing them exactly.

The submitted essay allows your supervisor to evaluate your understanding, and provides a good starting point for individual feedback. Essays also provide excellent material for later revision. Finally, your ability to write essays has a direct bearing on your performance in examinations, especially in arts subjects, and this may include submitted coursework (for subjects which include continuous assessment).

If you do it in the right way, the process of writing essays is at least as important as having the finished product and will contribute significantly to your overall understanding of your subject.

How to approach essay-writing

A poor way

Wait until the last night before it is due and then write the essay in one long session.

This approach may seem an efficient use of time, but it drastically reduces the value you derive from writing the essay. The danger is that you will not give enough time to considering the question and to thinking around the topic. You are likely to depend too much on your lecture notes or what you have immediately to hand, and to write a derivative essay as a result. You may not have all the information you need to write a full answer. You may not have clarified your own line of argument through insufficient thinking around the topic, and find that you want to change tack half-way through. Finally, your concentration will tire before long, rendering your argument unfocused and your style inexact.

A better way

Start as early as you can and develop the essay in stages.

This method allows you time to think about a question, to consider what it is getting at and how you want to approach it. It allows time to collect the material you need, to synthesise it and to develop your line of argument. You might evolve several different approaches before deciding on one. You can take the time to express your ideas clearly and exactly. It promotes engagement, independence of thought and *learning*. It also gives you the satisfaction of knowing that the piece of work you have produced is the result of your own thinking and, hopefully, is your best work.

Thinking and planning time

The more time you devote to thinking about a topic and to planning your essay, the more real benefit you will derive from the exercise. You will also find it much more interesting to write essays in this way.

- Give enough time to considering the question before you start to answer it. Pay particular attention to the words that instruct you in *how* to answer the question, such as "Discuss", "Analyse". "Account for" or "Compare". If you are not sure what you are being asked, find out before you write anything.
- Next, decide where you might find the information you need. Your supervisor should have suggested material, but do not rely on him or her to have given you everything. Visit the library, talk with others. Skim-read selected books and articles; analyse their relevance and usefulness. Note key points.

- Now plan your answer. Write down briefly:
 - a summary of your whole argument, in about five sentences;
 - the key point that you will make in each paragraph;
 - the evidence and examples that you will use to support your claims;
 - any unresolved questions - these are not a bad thing to have; in fact they often signal deeper areas of potential thought and understanding.

This 'thinking through' process is the aspect of essay-writing that teaches you the most, so consider spreading it over several short sessions. You will then be more confident about writing the essay.

How to write the essay

Remember that clarity is vital; your ideas should be clearly developed, each main idea having a separate paragraph, the paragraphs should follow logically from each other creating a movement that is easy to follow, and your style should always be exact and concise.

There is no one correct design for all essays; the form you choose will be determined partly by the discipline in which you are writing (your supervisor can advise you about this) and partly by the specific question you are answering. The following comments hold true generally:

Introductory paragraph. This is important, so take time over it (and return to it after the essay is completed).

- Do:**
- refer immediately to the title, showing that you have understood what the question is asking and have clarified any ambiguities in the wording;
 - define what you believe to be the key areas of enquiry;
 - consider any general issues which have a direct bearing on how you view these areas;
 - show that you have a clear focus and a direction.

- Don't:**
- give a précis of your whole answer;
 - describe unnecessary background information unless you are using it as evidence for a claim;
 - waffle.

The argument. Each main idea should have a paragraph of its own. Make clear very soon in each paragraph what its argument will be, and then provide the argument and the primary evidence (details, quotations, examples) which support it. An additional crucial factor is how you *construct* your paragraphs and how you *connect* the ideas in each.

Keep your tone reasonable and balanced. Imagine that your reader is intelligent and open to persuasion. Use a style that is clear and concise. Avoid slang. Resist the temptation to show off your skills of oratory. If you are ever unsure about what you are trying to say, stop writing until you have clarified the point in your mind (perhaps going back to your notes to help do so). Above all, show that you are alert, enquiring, and thinking.

The conclusion. Keep it brief: avoid a plodding review of what you have already said. Make sure that your conclusion directly answers the original question, and answers all of it. The conclusion is the right place to point to issues which the question raises without directly addressing, or to interesting related ideas, and which fall outside the direct remit of the essay.

Bibliography. Always acknowledge your sources. Your supervisor and/or your Faculty can supply you with guidance as to the appropriate format to use.

Presenting your essay. Your finished essay is the result of a number of hours of labour and comprises your considered thoughts about the question. Present it well, to show that you take pride in it and expect it to be taken seriously. Use good English. Check spelling and syntax (especially if you are using a computer since most software packages have such facilities).

Use feedback. Your supervisor should spend the time needed to give your essay proper consideration. Supervisors vary in how they do this, e.g. some put comments on the work itself while others give them orally in the supervision. Ensure that you get the feedback that you want and need.

Common mistakes. Every year, Cambridge examiners write reports which indicate that a number of candidates did not realise their full potential by making the following common mistakes in their essays:

- failing to consider the exact wording of the question;
- failing to address all aspects of the question;
- including material that was not relevant;
- describing what they should have discussed or analysed;
- employing unclear argument structures;
- using poor or inaccurate English
- overuse of footnotes.

All these mistakes are easy to avoid if you keep in mind the points made above.

Project work (including dissertations and long essays)

Writing an extended project requires similar skills to writing an essay, although there are a few differences:

- Break down the project into its separate stages:
 - consider the question and define your purpose;
 - discuss with your supervisor, or with lecturers and your Director of Studies, the range of approaches open to you;
 - ask where you might find the relevant material;
 - find relevant material and assessing its usefulness;
 - create a line of argument;
 - collate evidence;
 - write an outline (framework) and get feedback;
 - write one or more drafts and get feedback;
 - write the final project and ensure you follow the rules for its presentation and length.

To do all of these stages properly requires that you put together a timetable, starting with the deadline and planning backwards. Check with your Director of Studies about faculty-specific regulations for dissertation preparation and submission. Allow some extra time before the deadline in case you are ill or facilities such as printers are not functioning and take into account your other commitments.

- In the sciences, the proper use of diagrams is crucial. Make sure that they are relevant and informative, that they appear at the most appropriate place, that they are sufficiently large and uncramped by surrounding text, and that they are clearly titled and labelled.
- If your project lends itself to tables or charts of data, ensure that these are clearly titled that the axes are labelled, that they are uncramped and easy to interpret, and that you use footnotes for clarification and that you state your sources.
- If you have to write up experiments, observe a consistent pattern which includes a statement of aims, an account of the equipment used, a detailed description of the method employed to carry out the experiment, a detailed record of observations and results, and your conclusion. Check with your supervisors or Director of Studies about specific Faculty practice or requirements.
- Don't plagiarise – by any method.

See also various on-line advice provided by Departments and the Cambridge University Students Union, e.g.

www.socanth.cam.ac.uk/currentStudents/undergraduate/essayWritingGuide/essayWriting.html

www.phil.cam.ac.uk/teaching_staff/Smith/students/Essay_Paper

www.cusu.cam.ac.uk/academic/studyskills

Learning and memory

Much learning in Cambridge is through our encounters with supervisors, contemporaries, and people in other academic disciplines. These may be formal, such as supervisions, or informal such as when just talking with friends or other people. The collegiate system has, as a result, always helped intellectual progress. Those who look back on their time here often see this exposure to different learning experiences as a crucial element of their Cambridge education. Enjoy these opportunities.

How to help your memory

- Always seek to understand something before you try to remember it.
- Organise the information you are learning. Place a new topic within a context of what you have already learnt so that you can see how it fits into the overall picture. Get an overview of the whole of the new topic first so that you can fit the individual points into this framework: you will be able to recall the details more easily.
- As you read or listen to new information, make notes. This focuses your attention, promotes understanding and aids the passage of the key ideas into your long-term memory as you write. The notes also are valuable for later essay writing and/or revision.
- Beat forgetting. 'Forgetting' occurs when new material in the memory is obscured by all the information that comes in afterwards (60% is 'lost' within twenty-four hours in this way); the material is not actually lost — it just becomes out of reach. Keep it accessible through a series of regular reviews, whether daily or weekly. For instance, on the evening of a day that you made some notes, check through them before filing them away. Look at notes a day before a supervision to refresh your memory and to consider whether any topics warrant discussion in the supervision. Reviewing material keeps it fresh; learning without subsequent reviewing is largely wasted effort.

Learning by association

Your memory can hold many thousands of pieces of information if you learn how to associate them with other information when you commit them to memory in the first place. Placing details in an overview is one obvious way, but there are many other artificial devices known as 'mnemonics' or memory tricks: rhymes, acrostics, acronyms, stories, and (especially) visualisation. Make these absurd, vivid or funny and you will remember them better. Finally, use rote learning for information that will not stick in any other way. Don't necessarily sit in your room to do so. Many an undergraduate has used the walk to and from Granchester to commit things to memory. Think of the approach that works well for you and, especially in the early time of being in Cambridge, experiment with new methods that might suit you well.

Glossary of Cambridge terms

Also see Information for Students booklet and various web sites

Director of Studies- see page 8	Usually a Fellow of your own College (but may be a Fellow of another College) who advises you on what lectures and practical sessions you should attend, arranges supervisors and is generally available to talk with you about any aspect of your academic life and progress.
Easter Term- see page 3	Third of the three teaching terms (April – June).
Fellow (formerly ‘Don’)	A senior member of a College, usually holding an academic position in a faculty or department.
Fifth Week blues - see page 5	That time when the term seems to be going on for ever. Can occur at any time. Share your feelings with others to restore perspective as many feel the same!
Fresher (formerly ‘Freshman’)	A new undergraduate or graduate.
Freshers’ week	The first week of the Michaelmas Term (during which new students settle in and provided with orientation, as well as being courted by various College and University societies – especially at the ‘Freshers’ Fair’.
Lent Term - see page 3	Second of the three teaching terms (January – March).
May Week	The week or so after exams. It is in June!
Michaelmas Term - see page 3	First of the three teaching terms (October – December).
Post-doctoral researchers	Individuals who have completed a Ph.D. degree and now are employed on research contracts.
Post-graduate students	Individuals who are studying for Master or Ph.D. degrees.
Practicals – see page 11	equivalent to labs at MIT
Reporter – see page 12	University’s official “newspaper” which is published weekly in term time and contains information about discussions, decisions, courses and some job opportunities. It is available from many Cambridge book shops and also on-line at www.admin.cam.ac.uk/reporter . Worth looking at but no need to subscribe. Consult, as needed, for the lecture list, the examination timetable and specific job opportunities.
Supervisions – see page 8	Small-group teaching sessions, usually of one hour duration and often in groups of two or three, in which you can discuss your own learning needs and have individual support.
Supervisor – see page 8	An individual (Fellow, post-doctoral researcher or graduate student), who meets with you typically once a week to discuss your work for a particular paper or on a specific topic, to set assignments and to generally support and encourage your academic work on a frequent basis.
Tutor	A Tutor generally is a Fellow of your College whose role is to give advice on any topic and general support. Every undergraduate is assigned a Tutor in order to complement your Director of Studies who, at least initially, may focus more on the academic aspects of your life here.

Common abbreviations

It will help if you are familiar with the following words and abbreviations, which you will find frequently in the text and index of many of the books that you will read for your studies.

- c.** (circa) about; usually used with a date to show that it is approximate. For example: c. 1130.
- cf.** (confer) compare.
- do.** (ditto) the same.
- e.g.** (exempli gratia) for example.
- esp.** especially.
- et al.** (et alii, aliae, or alia) and others: used to save writing out a whole list of names.
- et seq.** (et sequens) and the following. For example: p. 36 et seq.
- f./ff.** following. For example: 7f. means page 7 and the following page. 7ff. means page 7 and following pages.
- ibid.** (ibidem) in the same place: used in an index to show that the in question comes from the same place.
- i.e.** (id est) that is.
- inf.** (infra) below: refers to a section still to come.
- p./pp.** page/pages.
- passim** in many places: used in an index to indicate that there are many references to a particular topic.
- q.v.** (quod vide) literally "which see"; look up this point or topic elsewhere in this book. For example: q.v. p. 45.
- sic** thus. Used when you quote a word or extract written by someone else which contains a mistake. It indicates that the mistake is not yours.
- viz** (videlicet) namely, that is to say. For example "Today is an important day, viz my birthday."

Further reading

- *although certainly not essential!*

Please make recommendations of books or websites that you have found useful.

General interest about Cambridge

Annan, Noël, *The Dons*, (University Of Chicago Press, August 2001)

Clive James, *May Week was in June*, (Picador; new edition June 1991)

Fun

Tom Sharpe, *Porterhouse Blues* (Secker & Warburg, London, 1974).

Jane Walmsley, *Brit-Think, Ameri-Think - A Transatlantic Survival Guide*, (Penguin Books, 2nd edition 2003).

Supervisions – also see information on Faculty and department websites

Fry, Stephen, *The Liar* (London, 1991). Especially pages 43-51 (of the paperback edition) for a very funny description of a Madeira-soaked supervision taking place between Professor Trefusis and Adrian Healey.

Background reading on essay work in the humanities

Amis, Kingsley, *The King's English*. Should help you to learn to write and speak English properly!

Bacon, Francis, *The Essays*. Ideally ed. Michael Kienan (Oxford: Clarendon Press, 1985), which gives a full account of the many revisions and additions. There is a good Penguin text, ed. John Pitcher, and the Oxford Authors, ed. Brian Vickers is also very helpful.

Eliot, T. S., *Notes Towards the Definition of Culture* (London, 1948). A case-study in how to combine the tentative with the assertive.

Learning and Memory

If you can cope with a pseudo-scientific small-ad feel, Tony Buzan's many books are quite useful. Try:

Buzan, Tony, *Master your memory*. This contains what Buzan calls a 'Total Learning Memory Technique' and lots of 'proofs' of this. It also has a good bibliography.