

Book Review

Studying Science: A guide to undergraduate success.

By Pauline Millican and John Heritage

Scion Publishing Ltd., Bloxham, Oxfordshire. ISBN 978-1-904842-74-3 (Office 2007 version)

Swiftly on the tail of the review for 'Study and Communication Skills for the Biosciences' 10.3108/beej.13.r1 I received an invitation to review another text aimed at the same audience; the new undergraduate student.

'Studying Science' is a slimmer and slightly less expensive (£15.99) book than that recently reviewed and is also available in two versions – ones for both Office 2007 and 2003 users. The intention is to provide a condensed and accessible handy reference text providing 'tips, skills and techniques to get you through your science course' which will serve as a convenient single point of reference.

The book begins with both 'short contents' and 'detailed contents' to enable swift random access. 'Starting Out' quickly explains how University differs from secondary or college education, and how degrees are awarded and validated. 'Your degree – preparation for a career' introduces sensible techniques to maintain a typical student lifestyle while building a platform for learning and effective study: Many students have problems with the freedom bestowed upon them and acquiring necessary self discipline quickly enough. This chapter makes the expectations clear and introduces the value of starting and maintaining a PDP to build a reflective attitude. Chapter 3, 'How to Learn in a University Setting', compares the surface and deep learner approaches before undergoing an analysis of how students learn realistically; reasonable study divisions by time or topic follow. Reading skills are not overlooked and tips for how notes may be taken so, overall, the approach is for effective and really useful habits to be formed, even fun ways to work with a friend to check understanding.

Learning from lectures (Chapter 5 – 'Making the Most of Teaching') has changed with the wealth of digital extensions around the lecture format now available, but learning how to behave, listen and take notes is advice worth repeating. This is extended to tutorials and practical classes using three Ps – Planning, Preparation and Participation. Field trips and teamwork are more infrequent by nature so these are included with advice to maximise each learning opportunity presented. Use of books and journals follows with an explanation of the scientific publishing process, leading to the use of online resources and databases (even care with Wikipedia!).

Using all these sources, especially digital ones, leads to risks of plagiarism. These issues are explored and illustrated with examples based on scientific literature so the student is aware of how to utilise the sources and provide original thought. Writing for reports and essays requires essential grammar, clarity and style skills to be developed as many students appear to have neglected these, so useful tips are provided based on examples of common errors. This section closes with plenty of tips for practical reports, posters and oral presentations, including how to take advantage of the feedback given in return.

A lightweight chapter 6 'Using Computers and Information Technology' appears to be reduced to minimal core information to enable it to be consistent across all platforms and software. One would expect local support information in the institution to cover the same but within the local context. However, this chapter does emphasise how to be organised with your IT – something I often observe needing re-enforcement. The following chapter on 'Revision and Examinations'

is more substantial, providing pragmatic advice on timing, methods and tools, followed by tips to reduce stress and stimulate recall. Examinations are sensibly decoded in terminology and style.

Having enjoyed one's success in exams the reader is invited to consider the pros and cons in 'Taking a Year Out' to appreciate the potential benefits of this experience, either at home or abroad. The main section of the book closes with a look at the optimum approach for the final year, using the 'carrot' of the potential life beyond, including the importance of the CV and the record of achievement left behind in the University.

The book has plenty of good advice for all students but particularly suited for those who fail to get to grips with the University environment *quickly* and need 'one simple guide' to accompany them: What it lacks in comprehensiveness it gains in readability. This book will illuminate a tried-and-tested path valuable for any new student. It condenses the key points which may be buried in what appears to be a mountain of information and advice for the new arrivals. Most students will benefit from many parts of the book but few would really need all of it. However, there are many who might find this a ready 'bible'.

The final third of the book provides appendices for applications based on two versions of Microsoft office. I am not so sure that the key elements of using office 2003 and office 2007 are best covered by a text book. There are many online support materials to teach each of the topics in this section, but it does identify and cover most of the essential skills in each for their effective application in an academic context.

Throughout the book the writing is very informative while delivered in a style which is very readable. Key terms and concepts are highlighted in the text in a balanced way, providing tips for the novice and improving students. The book may also serve well to inform parents about the context and expectations of the modern university environment and enable them to assist their offspring in maintaining a reasonable balance and attitude towards their studies.

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