

## IGCSE Agriculture (0600)

### How many lessons per week will I need to cover the syllabus?

This partly depends on what your students have done before they begin their IGCSE course. If they have been in your Centre for some years beforehand, then you may have been able to begin building up their knowledge and skills already. If they come to you from many different backgrounds, then you may need to do more work with them to prepare them for IGCSE. As a rough guideline, many Centres teach their IGCSE Agriculture students for about 2 hours 30 minutes per week over a 2-year period, but it is not unusual for the time allocated to be significantly more or less than this. You should try to have one relatively long session each week, so that your students can carry out practical work.

### Is there an option available which doesn't involve any assessment of practical skills?

No. Practical skills are an integral part of the applied science subject of Agriculture. Some of these skills are 'field work' based, in areas such as cultivation of crops or animal husbandry. Other practical skills are investigatory 'scientific' skills associated with finding out information about agricultural organisms and situations. This is reflected in the syllabus and in the assessment for IGCSE Agriculture. In preparing your candidates for the assessment of practical skills, and in giving them an appropriate experience of IGCSE Agriculture, you are expected to provide a range of practical work for them to do, so that they can develop the skills necessary for success. An Agriculture qualification without a practical component would be a second-rate assessment of the subject, and CIE aims to provide valid qualifications acceptable in all areas of the world.

### Agriculture is a field-based industry, so why does the course involve scientific practical work?

Actually, to quote the syllabus, Agriculture is an 'applied science' as well as a field-based industry. That is, it is a subject in which scientific research and the scientific method are used to advance the production of agricultural products. This means that it is essential that the syllabus and course demands that scientific practical work be part of the programme of work and an option for assessment, as well as 'field work'. Students also find practical work motivating, and it also helps them to understand the theory of the course. The practical assessment in the syllabus is designed for a field-based industry, and within the syllabus, clear details of appropriate contexts are given, both for Practical Exercises and for Project Work. The Paper 4 Practical Exercises assessment offers candidates the opportunity to be assessed in their 'field work' in a range of agricultural situations – the emphasis is on skills including responsibility, initiative, technique, perseverance and. Alternatively candidates may be entered for the Paper 5 Project Work assessment which should be a practical investigation (and therefore should use scientific methodology).

### What equipment should we have available?

The key thing here is to use what you have access to. The tools available locally are the tools that should be used in developing and assessing the practical skills. The syllabus makes clear the wide range of contexts in which such skills can be developed and assessed. Obviously the wider the range of tools and skills developed, the better equipped will be the candidates for the examination and assessment, and for application of what they have learned in a workplace later in life. Much additional information is given in Cambridge International Examination's booklet '*Planning for Practical Science in Secondary Schools*', (New Edition June 2002) available free from our publications department. This will give you a scientist's view of what equipment is required for scientific investigations; equipment that would be very useful in permitting candidates to conduct investigations at the more scientific end of the range of possible Project Work.

**The practical assessment is through coursework only. What are the advantages of coursework?**

One advantage of coursework is that the assessment is done during the course, well before the examinations at the end. By the time your students reach their examinations, the practical assessment is one thing less to worry about. A second advantage is that you are free to choose what practicals and projects you want your students to do, to suit the local conditions and resources in your school. Some teachers feel that coursework is a fairer assessment because it does not depend on performance on one day. Perhaps the greatest advantage is that it is motivating for students. The encouragement and interest generated by successful coursework, coupled with being able to see how they are progressing in their achievements throughout the course, both tend to inspire candidates to greater effort and achievement.

**I have decided that I want my candidates to follow IGCSE Agriculture and therefore to assess their coursework through the Paper 4 Practical Exercises or Paper 5 Project Work. What do I need to do?**

You – or another teacher in the Department – need to be trained to mark and internally moderate the coursework. The usual way to do this is by completing a Distance Training Pack, which we will send you for a fee. Then you need to have your work on this pack assessed, which we will do for a further fee. You can order this distance learning pack from the CIE Publications Price List and Order Form. Otherwise, contact CIE customer services at +44 1223 553554 or e-mail [International@ucles.org.uk](mailto:International@ucles.org.uk)

**Which is the correct textbook for the course?**

We don't require Centres to use any one particular textbook for our courses, and we would hope that wherever possible teachers would make use of a variety of different resources. It is good practice for students to get into the habit of using more than one book, and this also has the advantage that if they do not understand an explanation in one book, they may find a different explanation more helpful to them. We do provide a list of books and websites that we believe teachers may find helpful and you can find this on our website at [www.cie.org.uk](http://www.cie.org.uk). (You will need to click on 'Qualifications and Awards', 'IGCSE' button and 'Agriculture' then follow the instructions to locate the resource list.)

**Do I need to teach the course in the order given in the syllabus?**

No, the order in which you teach the course is entirely up to you. The curriculum content within the syllabus outlines the facts and concepts that will be assessed in the examination, but most teachers construct their own scheme of work based on the curriculum content.

**Some of the topics in the syllabus do not appear to be relevant in my country. Why do I have to teach these?**

Of course, countries differ widely in the relative importance of different agricultural practices. In this syllabus great care has been taken to ensure that you can use local or regional examples where possible. Where the syllabus demands that your students study agricultural processes that are not used at all in your region it is still important that these be studied. Apart from the obvious point that they may appear on the examination, it is also important to give candidates a balanced and broad experiences of agriculture. This enables them to apply their knowledge, skills and understanding in their later life even if they move to a new region, or if local agricultural practices change.

**The information about the terminology and units given towards the back of the syllabus is helpful, but where can I find out more?**

The Institute of Biology publishes an excellent booklet entitled *Biological Nomenclature - Standard terms and expressions used in the teaching of Biology*. This is now in its third edition. Cambridge International Examinations follow the recommendations in this booklet when setting examination papers. You will find it to be a valuable reference, containing further guidance on best practice in recording results and graph construction and many other issues. It can be obtained directly from the

Institute of Biology, 20 Queensberry Place, London, SW7 2DZ, England. Alternatively, you can order a copy from the Institute of Biology's web site at [http:// www.iob.org](http://www.iob.org) .

**I want to use last year's papers with my students. What were the pass marks for each grade?**

The grade boundaries change slightly from year to year to allow for any small variations in the difficulties of the papers. The boundaries should normally be in the ranges given below:

<b>Core syllabus (papers 1, 2 and practical)</b>		<b>Extended syllabus (paper 3 and practical)</b>	
		A	70 -75%
		B	60 -65%
C	60 - 65%	C	45 -50%
D	50 - 55%		
E	45 - 50%		
F	40 - 45%		
G	30 - 40%		

**I have heard that if a candidate gets a good grade on her extended paper (Paper 3), then her marks on the core papers (Papers 1 and 2) are not even counted. Is this true?**

The Scheme of Assessment for all the IGCSE science subjects is to change from 2004 onwards, but yes, at the moment this is true. Candidates who are entered for the Extended option take the core papers as a fall-back only, to be used if they do not get the expected grades on Paper 3. We calculate a grade for Paper 3 + the practical component, and another grade for Papers 1 and 2 and the practical component, and we award whichever grade is the higher.

**Does this mean that my extended candidates don't have to turn up for Papers 1 and 2?**

Yes and no. If they don't sit Papers 1 and 2 we will still be able to give them a grade based on Paper 3 and the practical component, and they won't be penalised for missing Papers 1 and 2. But this is a gamble. We can only give grades A\*, A, B and C from the extended option, so if a candidate misses a grade C (even by one or two marks) they will be given a grade U.

**Is the Scheme of Assessment going to change?**

Yes, the 2004 syllabus has been revised in response to a survey of teachers' views. The most significant changes are in the Scheme of Assessment. All candidates will take Paper 1 (multiple choice, assessing the core curriculum), as at present. Candidates will take either Paper 2 (structured paper, assessing the core curriculum) or Paper 3 (structured paper, assessing the extended curriculum), but not both. Candidates will also take one of the practical assessments as at present. All the papers taken by a candidate will count towards their final grade (including Paper 1 for extended candidates). The full range of grades from A\* down to G will be available to extended candidates, and grades from C to G will be available to candidates entering core options. In Agriculture IGCSE there are minor changes to the content of the syllabus, indicated by vertical black lines in the 2004 syllabus.