

Introduction

Aims

The main aims of the Introduction are to describe:

- the **specification content** of IGCSE and how it relates to the general **structure** of your course
- the paper that you will sit in your examination

Context

In the course of your study of this Geography course, you will acquire knowledge and understanding about a variety of human and physical Geography topics. The course also includes activities that give practice in a range of geographical skills that students will need to acquire for their examination.



Welcome!

Welcome to your IGCSE Geography course! Geography is the study of the Earth, its physical form and features, its political and physical divisions, the climate, productions and populations of different countries. By understanding the Earth, we give ourselves a much better chance of understanding the present and making the right decisions that will affect our future.

The Edexcel IGCSE in Geography enables students to:

- actively engage in the process of geography to develop as effective and independent learners and as critical and reflective thinkers with enquiring minds
- develop their knowledge and understanding of geographical concepts and appreciate the relevance of these concepts to our changing world
- develop a framework of spatial awareness in which to appreciate the importance of the location of places and environments from a local to global
- appreciate the differences and similarities between people's views of the world, its environments, societies and cultures
- understand the significance of values and attitudes to the development and resolution of issues
- develop their responsibilities as global citizens and recognise how they can contribute to a future that is sustainable and inclusive
- develop and apply their learning to the real world through fieldwork and other out-of-classroom learning
- use geographical skills, appropriate technologies, enquiry and analysis.

The written exam(s) you will take at the end of this course cover a series of geographical topics based on topics relating to both physical and human Geography.

Naturally the examiners will be looking for good factual knowledge, but the IGCSE examination is designed to test more than this — the successful candidate will also have acquired the skills necessary to any true geographer.

Course Aims

The course is structured around the aims set out in the Edexcel syllabus:

- that coverage should touch, in a selective manner, the main subject areas which are appropriate at this level: the natural environment; resources and production; population and

settlement, as well as the related topics of globalisation, human welfare and sustainability

- emphasis should be placed on the relationship between people and the environment
- that geography be recognised as a dynamic discipline in continuous change
- that content should be specified in such a way that students can explore the geography of their own countries
- that case studies are used to exemplify key ideas
- that students should be encouraged to undertake local fieldwork and other practical exercises to underpin knowledge and understanding as well as to illustrate content themes
- that students should become competent in the use of a range of skills and techniques.

The Arrangement of Lessons

Preliminary Module: Geographical Skills

Lesson No. Title

- 1 Map References
- 2 Height and Relief Features
- 3 Cross-Sections
- 4 Rivers and Valleys
- 5 Glaciation; Coastlines
- 6 Communications and Settlement
- 7 Vegetation and Land Use
- 8 Interpreting Photographs

Tutor-marked Assignment A

- 9 Simplified Maps
- 10 The Interpretation of Data
- 11 The Interpretation of Data (2)

Tutor-marked Assignment B

Section A: The Natural Environment and People

Module One: River Environments

- 12 Hydrological Cycle
- 13 Running Water and the Development of Land Forms
- 14 The Uses of Water
- 15 Differences in Water Quality
- 16 Flooding

Tutor-marked Assignment C

- 17 Measuring Channel Features: Fieldwork

Tutor-marked Assignment D: Practical Fieldwork 1. Investigation of change in a river channel through primary and secondary fieldwork evidence

Module Two: Coastal Environments

- 18 Physical Processes and Coastal Landforms

(Virtual) Fieldwork Opportunity: Investigation of coastal processes and form through primary and secondary fieldwork evidence

- 19 Ecosystems and Coastlines
- 20 Coastal Ecosystems and the Threat of Development
- 21 The Conflict between Development and Conservation
- 22 Coasts as a Natural System

Tutor-marked Assignment E

Section B: People and their Environments

Module Three: Economic Activity and Energy

- 23 Employment and the Location and Growth of Employment Sectors
- 24 Employment Structures and Development
- 25 Energy Resources and Demand, Production, and the Energy Gap
- 26 Renewable vs Non-Renewable Energy Sources (Virtual) Fieldwork Opportunity: Investigating changing energy use through primary and secondary evidence**

Tutor-marked Assignment F

Module Four: Urban Environments

- 27 The Nature of Urbanisation
- 28 Problems of Rapid Urbanisation
- 29 Urban Land Use and Urban Challenges

Tutor-marked Assignment G: Practical Fieldwork 2: Investigating Change in Land Use: Transect Plotting: Investigating the changing use of central/inner urban environments through primary and secondary evidence

- 30 Urban Change
- 31 Sustainable Management of Urban Environments

Tutor-marked Assignment H

Section C: Global Issues

Module Five: Fragile Environments and Climate Change

- 32 Fragile Environments, Sustainability, Soil Erosion and Desertification
- 33 Deforestation

- 34 Causes, Consequences, and Management of Global Warming and Climate Change

Tutor-marked Assignment I

Module Six: Revision and Mock Exam

- 35 Revision and Mock Exam

Tutor-marked Assignment J

- (36) Appendix: Fieldwork Guidance and Exemplars

The Specification Content and General Structure of the Course

This course prepares you for the Edexcel IGCSE Geography examination (4GE1, for first examination in 2019). There will be two examination papers; Paper 1, Physical Geography (1 hr 10 minutes), and Paper 2, Human Geography (1 hr 45 minutes)

You will answer a total of five questions on the five topics included in this course, and also two fieldwork-related questions, from any of those that you have studied making a total of 7 questions.

The 4GE1 topics included in this course are:

Paper 1 – Physical Geography (1hr 10 minutes)

Section A

- River environments
- Coastal environments

Section B – Fieldwork

Paper 2 – Human Geography (1hr 45 minutes)

Section A

- Economic Activity and Energy
- Urban Environments

Section B – Fieldwork

Section C – Fragile Environments

Your course includes lessons on each of the five topics listed above, and also several geography fieldwork enquiries, of which *two* are practical fieldwork investigations (TMAs D and G). The others may include virtual fieldwork involving research based on secondary

sources such as books, articles or the internet, or secondary data provided to you. In the examination, questions *may* be asked on any of the practical geography enquiries. These are therefore an important element of the course.

Do not underestimate the time it will take to plan, implement and report a project satisfactorily. When developing your study plan, you should set aside at least two weeks per investigation. Further information about fieldwork is given below; and you should read this very carefully.

The Method of Study

The OOL course is contained in five main sections or modules to match the five course topics.

Each module is divided into a number of lessons with specific aims grouped under a key idea. The lessons contain everything that you should learn, and there are activities and ‘tests’ to help you to check your understanding of it all. There are also case studies included within each module; these act as ‘examples’ to illustrate a particular topic area that you have studied. The specifications sets clear guidelines as to what case studies are required and where, and all must be learnt for the exam as some questions require the use of (a) case study/studies.

Self-assessment is part of the learning process so when you have completed each activity you check your results against the model answers before you proceed to the next stage. **Self-Assessment Tests** follow some of the lessons.

It is most important that you do not proceed to the next lesson till you have mastered and understood all the activities of a lesson. Answers to a lesson’s activities, and to its self-assessment tests, are included at the end of the lesson.

Tutor-marked Assignments follow the completion of a major theme within a Section. They are more searching and are designed to test skills, knowledge and understanding at various levels of ability and over a wider area of the syllabus. Again, these tests must be completed under strict test conditions. When completed, they should be sent to your Tutor who will then assess them before they are returned to you with comments and suggested answers.

The final part of the learning and assessment process comes at the end of the Course when you sit the mock exam. Since this paper covers the whole course it is essential that you allow a period of revision beforehand. Again, the answers to these papers must be sent to your Tutor for detailed assessment and final comments.

It is your responsibility to plan out a lesson timetable bearing in mind the date of your actual examination. You should therefore aim to complete the course at least a month before the examination. This will allow time for revision, sorting out any aspects of the syllabus about which you are not sure, and competing past papers/practice questions.

Fieldwork: the Geographical Enquiry

Guidance for the practical skills and techniques required for fieldwork will be found particularly in Lessons 1-11, but almost every part of the course should prove useful. Do not hesitate to ask for your tutor's advice about this crucial aspect of your studies.

The specification states that, in the exam, questions may be asked about *any* of the geography fieldwork enquiries. There are two practical fieldwork enquiries; these two pieces of fieldwork comprise TMA D and TMA G in your course. It is also recommended that the remaining enquiries also involve practical learning. However, the exam board appreciates that this may be difficult, e.g. where geographical location/security does not allow candidates to collect data first-hand. In this instance, the exam board allows for these to be carried out using secondary data. However, the exam board makes it clear that:

“virtual fieldwork is not to be used as a way of short-cutting or bypassing the original fieldwork opportunities which are central to the delivery of the course.”

And that:

“learners should work with the substitute data, e.g. graphing, analysis, conclusions, evaluations, etc, as if it were their own.”

In other words, although secondary data may, in certain circumstances, be used to substitute primary data (data collected first-hand), candidates **MUST** write the investigation up in full, following the ‘enquiry process’ (see below) as if they *did* collect it themselves.

All fieldwork studies **must** involve the consideration of an argument or problem or an assertion to be tested. First-hand data collection (e.g. a questionnaire, stream survey or pedestrian count), recording and use should take place within the two (minimum) practical investigations.

Edexcel also offer further guidance and exemplars of fieldwork opportunities to enable students to gain further understanding of examination requirements. Their guidance is included in the Appendix to this course.

The Fieldwork Opportunities you will undertake

SECTION A

1. River environments

- Measuring channel characteristics (see Lesson 17)

2. Coastal environments

- Investigating coastal processes / Measuring beach profiles and sediment characteristics (see Lesson 18)

SECTION B

4. Economic activity and energy

- Investigating people's conflicting views on the use and impacts of renewable and non-renewable energy / changing energy use (see Lesson 26)

6. Urban environments

- Investigating change in land use / the changing use of central/inner urban environments (see Lesson 29)

The enquiry process

Fieldwork will be assessed in the examination. You will be assessed according to five clearly defined criteria:

- applied understanding (of what you aim to do)
- methodology (how you go about it)
- data presentation
- data interpretation
- evaluation (how successful your study was)

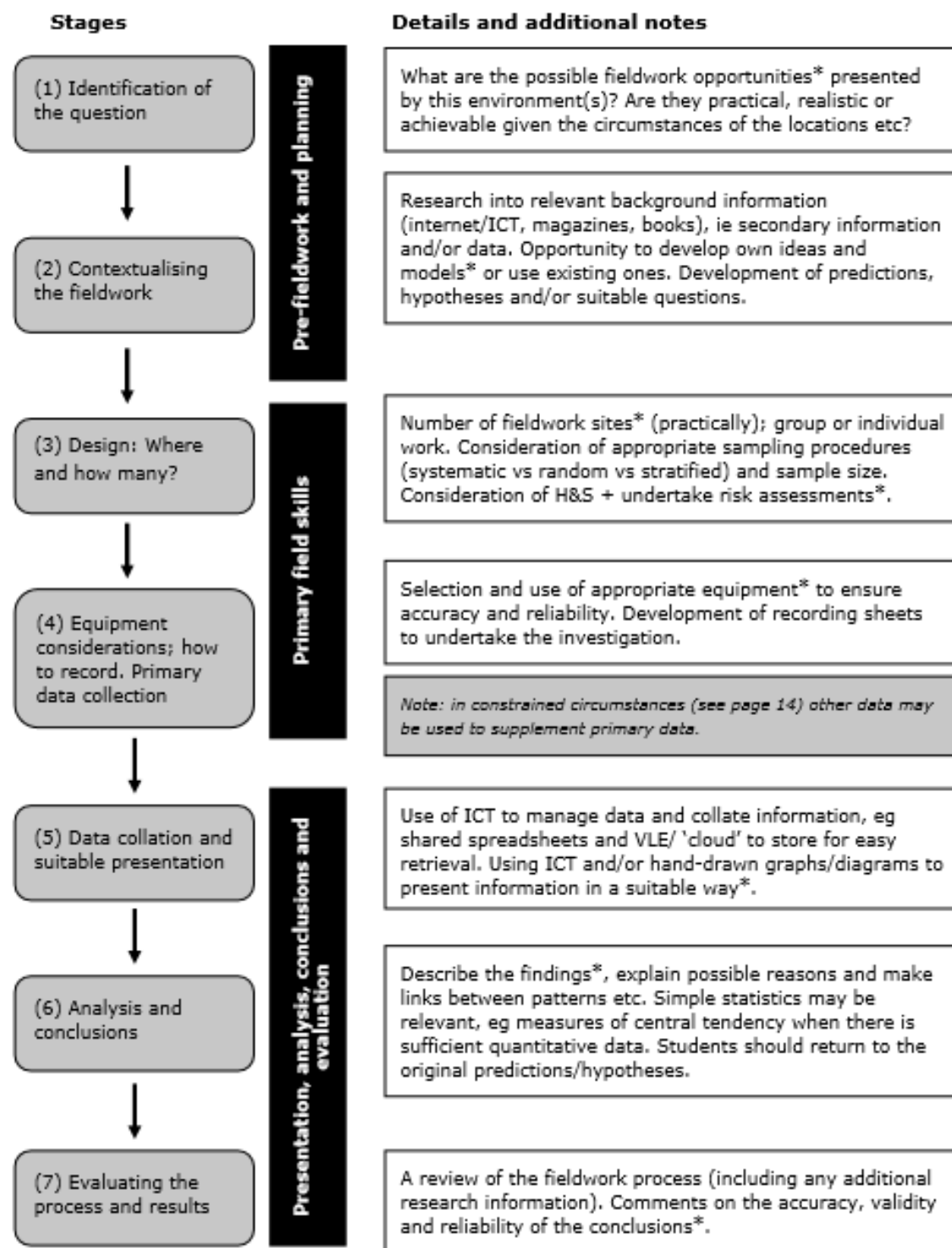
Throughout their course, learners need to acquire a range of geographical skills through fieldwork and linked practical exercises. Fieldwork and enquiry skills in readiness for assessment must include:

- pre-fieldwork planning — designing a fieldwork investigation, as per the qualification content. This may include a degree of planning research.
- primary field skills — undertaking a field investigation; the need for sampling, data collection and recording techniques.
- presentation, analysis, conclusions and evaluation skills — using the range of data presentation techniques; analysis of data and drawing conclusions;
- evaluating the techniques used and the conclusions drawn.
- Fieldwork and practical enquiry-based learning should also support wider practical skills. In particular:
 - **analysis of information** — reviewing data and other information, to see if they are accurate, suitable for the purpose or misleading;
 - **atlas skills** — using an atlas wherever relevant to the course (book or electronic);
 - **data analysis skills** — simple descriptive statistics, such as lines of best fit, means, medians, modes; also measures of central tendency if relevant/possible;
 - **graphical skills** — compiling graphs and flow lines; using proportional symbols; annotating maps; diagrams and photographs;
 - **map skills** — with particular reference to maps (including digital maps/Geographical Information Systems): using grid references; understanding scales; recognising symbols; identifying landforms and human features of the landscape;
 - **photo-interpretation skills** — reading vertical and oblique aerial photographs and satellite images;
 - **problem-solving skills** — identifying the views of interested people (stakeholders), recognising that stakeholders may have different views on specific issues;
 - **sketching and photographing skills** — communicating ideas through simple sketch maps, field sketches and annotated photographs;
 - **spatial awareness** — identifying the relative locations and relationships between features.

All fieldwork investigations in Geography follow the ‘enquiry process’. It is a bit like a recipe for baking a cake – all of the ingredients need to be included, in the right order, for the ‘end result’ to be a success!

Take a look at what this involves:

Practical geographical enquiry process



Note that, in the exam:

- in the diagram above indicate areas where there are strong links to questioning in the exam, e.g. these are common assessment areas.
- fieldwork questions will use 'unseen information', but in environments that have been studied. In other words, although

you have not seen the information provided to you in the exam, you are expected to *apply* your fieldwork knowledge/understanding, and skill, in order to answer the questions related to this information.

You would be well advised to follow the above sequence of in order to show, through your section headings, etc, that you are aware of the various criteria that will be used in marking you. In the exam, questions may range from those asking you to suggest a suitable hypothesis or title, to those asking you about appropriate equipment, methods or data display. They may give you data and ask you to draw a suitable diagram to display it. They may describe a method and ask you to suggest limitations. They may show you graphs and charts and ask you to draw conclusions

You should take time and care with *every* fieldwork investigation during the course, so that they are completed to the very best of your ability, and this will ensure that you are fully prepared for the fieldwork questions in the exam. The more you put into this element of this course, the easier the fieldwork will become, and the better you will do in the exam.

The fieldwork form below is designed to help you organise your thoughts about fieldwork, during the *planning stage* of each investigation. It gives you some ideas of the sorts of things you should think about, and include, in each section. You will also find one with each fieldwork opportunity in the folder, along with a blank copy for you to use to plan/brainstorm your ideas before starting the fieldwork.

Fieldwork Planner

Title: this is usually quite vague. It may start with 'An investigation into....' or 'a study of...'. It will draw our attention to the geographical theory behind the study and may mention the location.

Introduction: This will locate the study area using maps (secondary data, map drawing skills) and may outline the theory behind the study. It will also include:

Aim(s): these tell us what you are trying to achieve with your study. Are you comparing something in real life to theory (a model perhaps?) or are you using existing theory to try to find something new in real life? Use terms like 'to assess the size and shape of...', or 'to identify typical features of...', or 'to compare...'.
Hypotheses or key questions: these give you statements to test. Don't have too many. One may be enough. Three or four are plenty. Look at your title and your aims. Make sure they don't contradict each other. If you are looking for channel features in a river then think about the features you expect to find and write a hypothesis to match *eg that typical river features will be change with distance downstream*. Keep the wording simple. You can justify your hypotheses underneath if you wish. For example:

1. *That age of buildings will decrease with distance from the town centre.*

This is likely as the first buildings are usually found where development of the town began and successive building was forced to take place in concentric circles around them.

Method and equipment: now you know what you are trying to find out, this is where you describe the methods you would use to achieve your aims and test your hypotheses. Be specific. The examiner would want to know how you would do it, why you would do it that way, how that method would address your aims and hypotheses. We need to know the mechanics of the study. If you plan a questionnaire, how many people would you need to ask? When would you do it? How would you make it fair? Where would you stand? If you are planning a beach study what equipment would you need? How would you record the results? How would you make sure you are safe?

Data presentation and interpretation: this is where virtual fieldwork gets really virtual! If you are not actually planning to go out and do this and you have not been given any data to display you will have to plan the sorts of display tools you could use given the data you would expect to receive. If this is a river quality survey and you expect to have pH data for several stations downstream you might suggest a visual display to show pH change in colour on a graph with stations along the bottom axis and pH levels up the side. You could sketch suggestions. Remember that the examiner is looking for variety of appropriate skills. Suggest what you might write in an analysis of such diagrams. Could you spot trends? Anomalies? Good analysis is objective. It doesn't try to twist results to fit expectations but you can try to account for what you see.

Statistical tests: you need to be familiar with a few of these. *Nearest neighbour analysis* is useful for anything from clustering of shops or snails on a beach. *Spearman's rank correlation co-efficient* is good for spotting statistical significance of data that you might draw on a scattergraph. Suggesting appropriate tests and knowing how to use them is a high order skill.

Conclusions: These are very tricky without real data but if you do have data, either given to you for a virtual piece of fieldwork or from your own real fieldwork then conclusions are important. Good conclusions are not black and white. You will not 'prove' anything. You may 'have evidence to support or negate your hypotheses.' You should refer to your hypotheses. You may be able to modify them for a future study. If you can show your conclusions visually, on a map for example (*break point analysis* or *spheres of influence*), then do.

Evaluation and bibliography: this is where you suggest limitations to your method or indeed any other part of your study. Maybe a different use of shading in your display would have led you to a different conclusion? Maybe you should have issued more questionnaires? Maybe you should have gone back and done it again in a different season? Maybe your choice of location was flawed? Were there other ways of achieving the same aim? Real fieldwork would always have a bibliography. Do some research to see if anyone else has done similar work. Secondary data will give you credit if you credit using it. If you don't, it is plagiarism. Be careful.

Presentation of Fieldwork

Each of the two Fieldwork TMAs should be completed and compiled into a folder. This should be presented on A4 paper (any larger material must be folded to this size). If posting, each sheet must be numbered and secured together and must be identified with your name, and the relevant cover sheet also included.

The other fieldwork tasks as not formal 'assignments' but it is strongly recommended that you send these to your tutor as well. They will be able to provide you with vital feedback in order to make sure that you are 100% confident with ALL fieldwork, and are therefore ready for questions relating to any of the fieldwork you have undertaken in the exam

Investigations may be handwritten or word-processed, but remember that in the exam you will need to do everything by hand! The quality of presentation and range of skills used, regardless of the methods employed, will be assessed.

The total word-count for the fieldwork investigations should be between 2000-2500 words. Candidates exceeding this by more than 500 words should edit their fieldwork down!



Risk Assessment

It is the responsibility of the candidate (and any relevant parent or guardian) to ensure that a risk assessment is carried out before any practical fieldwork. Where a candidate is under eighteen, an adult should be present to supervise the candidate's practical fieldwork, and ensure that local conditions do not present unacceptable risks.

Additional Guidance and Support with Fieldwork

The Edexcel website contains additional support materials, e.g. the specification outlines the requirements for fieldwork, and past papers offer a wealth of examples of the types of questions you may be asked.

Each fieldwork opportunity/task in the folder gives you specific guidance relating to completing that particular fieldwork investigation. You should read this very carefully indeed!

The Field Studies Council (FSC) and The Royal Geographical Society (RGS) also have a huge amount of extremely useful information regarding fieldwork on their websites. Both links below should be used to support you with your fieldwork during the course:

www.ool.co.uk/0016gi and www.ool.co.uk/0016gi2

Your tutor is also there to support you with any questions you may have – use them!

Studying the Syllabus

You should be sure to acquire your own copy of the specification or syllabus from the Edexcel website at www.ool.co.uk/0017gi2.

We advise that you download a copy of the syllabus and use it throughout your studies as a tool to help you as you progress.

Edexcel also provides a handbook for private candidates at www.ool.co.uk/0017gi3.

Closer to your exam you may also find useful tips on Edexcel's Examzone at www.ool.co.uk/0017gi4.

You might also use past exam papers as part of your revision. You can access these at www.ool.co.uk/0017gi5. But please note that the specification was slightly different until June 2018.

However, ALL past papers for the IGCSE Geography exam may be used to view and revise / do practice questions on the five main topics, and also the fieldwork, that you have studied during the course.

To make revision easier at the end, consider what you can do *from the start* to help you later on, e.g. summarizing case studies, highlighting or underlining key information as you go, or making flash cards e.g. for key terms as you go along. It is your folder – you can 'use' it as you wish to help you as much as possible to do the best that you possibly can!

Using the Internet

All students benefit from access to the Internet. You will find a wealth of information on all the topics in your course. As well as the Edexcel website (www.edexcel.com), you should get into the habit of checking the Oxford Open Learning site (www.ool.co.uk) where you may find news, additional resources and interactive features as time goes by.

Course Links to Online Resources

The course has been written specifically with the demands of the IGCSE specification in mind and no supporting textbook is required for you to be able to follow the course successfully. However, some students may wish to purchase the accompanying course textbook to support their learning.

Given the advantages that online resources offer to the study of geography, some of the course activities will require you to go online to access, for example, videos of geographical processes or other communities, interactive maps, or photographic material.

It is assumed, therefore, that students will be able to access a computer either at home or in your local library. Some of the course activities ask you to access the GeographyAlltheWay website at <http://www.geographyalltheway.com> (or www.ool.co.uk/0018gj).

The resources on this website have been compiled by a teacher of Geography IGCSE and are specifically designed to support the course specification. You should find that they are free although a password may be required.

The resources include videos, simulations, maps, diagrams, graphs, tables, activities, and 'mysteries'. They provide excellent support materials for the course, and it is expected that all students will be able to access the materials as a means to consolidate, explore further, and enjoy the course.

A note on web addresses

This course is full of instructions and suggestions to look at specific websites. So to gain full benefit from this course you will need regular access to the internet. But please note the following:

Webpages are being deleted and moved all the time. By the time you reach a specific lesson, it is inevitable that some of the webpages to which you are directed will have disappeared (or moved). Sometimes OOL will be able to find an adequate substitute, sometimes not. Please do not panic! If you come across a link that seems to be broken, please continue with the lesson. You should find that there is enough material and practice within the lesson itself to enable you to understand all the topics. If the link seems essential, it may be that you can find equivalent webpages yourself (via a Google search, say) but very few weblinks are that critical.

Because Oxford Open Learning is not responsible for the content of external websites, there may be some changes to material that are beyond our control. Please let us know at weblinks@ool.co.uk if you

find a link that does not work and we will do our best to correct this, or provide an alternative source.

Please note: where downloaded from the internet, some images reproduced in this course folder include details of website addresses and the source is acknowledged. Where the source is not given, the image is in the public domain. You might find all these images in colour online.

Further Resources

To supplement your study we recommend that you explore a wide range of sources, to which the following is a brief guide. Although it is not a required purchase for students on this course, the best supporting text you could get hold of is this one:

Michael Witherick, *Edexcel International GCSE (9-1) Geography (Student Book)* (Pearson, 2017; ISBN-13: 978-0435184834)

Other potentially valuable resources include:

Google Earth: <http://earth.google.co.uk/>

<http://www.ordnancesurvey.co.uk/oswebsite/>

<http://www.bbc.co.uk/schools/gcsebitesize/geography/>

Many geographical processes can now be viewed on video and image websites such as:

You Tube: <http://www.youtube.com/>

Flickr: <http://www.flickr.com/>

Google Images: <http://images.google.com/>

Google Maps: <http://maps.google.co.uk/>

The Royal Geographical Society website includes photographic images and other resources useful to project work:

<http://www.rgs.org/HomePage.htm>

Edexcel include lists of resources for IGCSE geography on their website at www.ool.co.uk/0019gi.

Click on the link and scroll to the section called 'Resources'.

The Cambridge examining board also includes a list of resources for Geography IGCSE at www.ool.co.uk/0019gi2.

Lesson activities will refer you to specific resources both in print and online.

n.b. Google offer schools and young people tutorials on how to use their sites at www.ool.co.uk/0019gi3.

The short quizzes offer an excellent introduction to online searching and provide a useful introduction to searching not only geography, but all sorts of other subjects as well. The short tutorial will help you search accurately and save lots of time later on. Have a go!

It is important to look at a variety of different approaches to key topics. One easy way to buy supporting texts is through the OOL website (www.ool.co.uk).

Some of the activities in the lessons may require you to use your initiative in hunting out information either online, in your atlas or (via your local library) in other textbooks. Such initiative is one of the skills you are supposed to be learning and the more sources you refer to the better your work is likely to be.

Finally, good luck!

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