

teachers' handbook

Version 3 April 2010



GCSE

Design and Technology: Textiles Technology

J307 – Full Course J047 – Short Course

This handbook is designed to accompany the OCR GCSE Design and Technology: Textiles Technology specification for teaching from September 2009. This booklet contains the following support materials:

Subject specific guidance Resource list

Publisher partner resources

Frequently asked questions

Other forms of support.



www.ocr.org.uk/textilestechnology/newgcse www.ocr.org.uk/textilestechnology/newgcsesc www.ocr.org.uk/innovatorsuite/newgcse

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Introduction

OCR is offering new GCSEs for first teaching in September 2009.

We've taken this opportunity to improve the quality of our GCSEs for teachers and students alike.

We've made improvements in three key areas: updated and relevant content, a focus on developing students personal, learning and thinking skills, and flexible assessment, so you can choose the best learning approach for the job.

We want to make the introduction of these new GCSEs as easy for you to manage as possible.

The main changes are:

- Controlled assessment will be introduced for most subjects
- The opportunity will be taken to bring course content up to date
- Examinations should provide opportunity for extended writing and more varied question types
- All GCSEs will meet the requirements of the Disability Discrimination Act.

Our approach is to provide consistency across all our GCSEs by offering the flexibility that unitised qualifications bring, allowing teaching and assessment to be either a linear or unitised fashion.

OCR offers a range of support materials, developed following extensive research and consultation with teachers. We've designed them to save you time when preparing for the new specification and to support you while teaching them.

It is important to make the point that this Teachers' Handbook plays a secondary role to the specifications themselves. The GCSE Design & Technology: Textiles Technology specification is the document on which assessment is based: it specifies what content and skills need to be covered. At all times therefore, the Teachers' Handbook should be read in conjunction with the Specification. If clarification on a particular point is sought, then that clarification must be found in the Specification itself.

Subject specific guidance

This document is designed to support delivery of GCSE Design and Technology: Textiles Technology (J307) and GCSE (Short course) Design and Technology: Textiles Technology (J047). We hope you will find it useful in planning your delivery and assessment opportunities.

There are four units available for Design and Technology: Textiles Technology. They are:

- Unit A571: Introduction to designing and making
- Unit A572: Sustainable design
- Unit A573: Making quality products
- Unit A574: Technical aspects of designing and making

GCSE candidates must take all four units (in any order) whilst short course candidates can only take units A571 and A572 (in any order).

These documents do not seek to prescribe how the subject should be delivered. They merely seek to show the breadth and range of learning opportunities within this subject area. We hope centres will use these as a starting point for developing inspiring and innovative courses that meet the needs of their students.

Unit A572 Sustainable design

This unit aims to develop a candidate's knowledge and understanding of sustainability, environmental concerns, cultural, moral and social issues. Candidates will look at how Design and Technology has evolved through examination of the products from the past and present. Candidates need to consider how future designs will impact on the world in which we live. They will need to study examples of both old and new products in order that they gain awareness and understanding of recent trends and innovations in design and production, labelling, packaging and the impact that the design of such products is having on the environment, society and the economy.

Candidates will need to consider how future designs/ products will impact on the world in which we live. By looking at old and new products candidates will gain awareness and understanding of trends and innovations in design and manufacture, labeling, packaging and the impact that the design of such products is having on the environment, society and the economy.

Moral, cultural, economic, environmental and sustainability issues are inherent in design and technology.

Through this unit candidates will be able to answer some of the following questions:

- What is meant by a 'product life cycle'?
- Why were certain materials chosen and used?
- What is meant by planned obsolescence?
- What do we mean by the 6 R's?
- What can we do to ensure eventual disposal of products/ materials is as eco friendly as possible?

These are just some of the key questions that you should be able to answer.

The assessment of this unit is through an externally set and marked test:

- This assessment unit can be taken in either January or June examination session.
- It represents 20% of a full GCSE qualification or 40% of a short course qualification.
- The maximum mark for the unit is 60.
- The duration of the examination is 1 hour and the paper is divided into two sections.
- **Section A** consists of fifteen questions covering generic issues associated with sustainability, society, the economy and the environment.
- **Section B** consists of three questions which will require you to relate your knowledge and understanding of the '6R's', materials, processes and the design of products.

Banded Mark Scheme

It is to be expected that in Section B of the paper one question will require detailed written responses and will be answered through a banded mark scheme. Banded mark schemes do require a more detailed and technical answer that uses the correct subject specialist terminology and also takes into account the quality of written communication. The questions will have an asterisk(*) to show this.

For example:

Level 1 (0-2 marks)

A basic analysis, showing some understanding. There will be little or no use of specialist terms. Answers may be ambiguous or disorganised. Errors of grammar, punctuation and spelling may be intrusive.

Level 2 (3-4 marks)

Adequate analysis, showing understanding. Candidates can provide a description using some specialist terminology although these may not be always used appropriately. The information will be presented for the most part in a structured format. There may be occasional errors in spelling, grammar and punctuation.

Level 3 (5-6 marks)

Thorough analysis, showing clear understanding. Specialist terms will be used appropriately and correctly. The information will be presented in a structured format. The candidate will demonstrate the accurate use of spelling, punctuation and grammar.

Unit A574 Technical aspects of designing and making

Introduction to the Unit A574 assessment

The unit A574 examination is a 1 hour 15 minutes examination worth 20% of the GCSE full course marks. It is externally marked and is intended to be taken at the end of a two year course.

The paper consists of five questions that focus on the technical aspects of designing and making in Textiles.

Section A

Section A consists of three questions based on aspects of working with materials, tools and equipment.

Section B

Section B has two questions on the design of textile products with particular emphasis on sustainability and how products meet the needs people. One of these questions will be design based.

Each question starts with easy parts and they get progressively more difficult. Two of the questions will be marked with asterisk (*). It will be marked on the quality of written communication called banded marking.

Assessment of this unit

This unit is assessed by an externally set and marked test that is available in January and June. The test is 75 minutes in length and is divided into sections A and section B. Section A consists of three questions based on the technical aspects of working with ingredients and equipment. Section B consists of two questions on the design of products reflecting the wider aspects of sustainability and human use. One of these questions will require a design response.

The assessment objectives targeted by the paper are:

AO1 – recall, select and communicate their knowledge and understanding in design technology including its wider effects

AO3 – analyse and evaluate products including their design and production.

Resources

A resource list for teachers

Carey Clarkson, Jayne March and Joy Palmer GCSE Textiles Technology for OCR Teacher's Resource File ISBN 0-435-41667-7

Sarah E Braddock and Marie O'Mahony *Techno Textiles – Revolutionary Fabrics for Fashion and Design* ISBN 0-500-28096-7

Sarah E Braddock and Marie O'Mahony *Techno Textiles 2 – Revolutionary Fabrics for Fashion and Design* ISBN 0-500-28684-5

Sarah E Braddock and Marie O'Mahony *Sportstech – Revolutionary Fabrics, Fashion & Design* ISBN 0-500-51086-5

Clothing Technology – Tekot International ISBN – 3-8085-6221-8

Lesley Cresswell Textiles at the Cutting Edge ISBN - 1-899527-17-6

Alastair Fuad-Luke The Eco-Design Handbook ISBN - 0-500-28521-7

A resource list for students

Carey Clarkson, Jayne March and Joy Palmer *GCSE Textiles Technology for OCR* Student Book ISBN 0-435-41666-9 Teacher's Resource File ISBN 0-435-41667-7 Revision Guide

Jane Down, Textiles Technology to GCSE ISBN 0-19-832813-3

Rose Sinclair and Sue Morgan, GCSE Design & Technology for AQA Textiles Technology ISBN 978-0-435413-49-1

Textiles Technology Teacher's Resource File ISBN 978-0-435413-50-7

Alison Bartle & Bernie O'Connor Design Technology - Textiles Technology ISBN 1-873929-65-X

Hazel King, *Trends in Textiles Technology* Set of 6 books, revised and updated by Carey Clarkson.

Dyes and Decoration ISBN 978-0-431-99017-0 Design, Cut and Shape ISBN 978-0-431-99016-3 Fabric Types ISBN 978-0-431-99019-4 Fibre to Fabric ISBN 978-0-431-99018-7 Fashion ISBN 978-0-431-99015-6 The Clothing Industry ISBN 978-0-431-99014-9

There is also a new textbook that has been written to support the new specification. It is being published by Hodder and is due out in March 2009.

DVD List

Textile DVDs from 'Classroom Video' Classroon video Limited St Thomas Court Thomas Lane Redcliffe Bristol BS1 6JG

Telephone 0870 850 8256 Fax 0870 850 8424

Email: orders@classroomvideo.co.uk

www.classroomvideo.co.uk

All have Teacher's notes included and are 24 – 30 minutes long.

Introducing Textiles
CAD CAM in Textiles Manufacturing
Smart Textiles
Nylon – Fibre to Fabric
A Textile World

Pumpkin Television Limited 21 Winsor Road St Andrews Bristol BS6 5BW

Mass Production Systems and Techniques Printing and Dyeing Testing Textiles CAD/CAM

Teachers notes, script and student activities included.

Other forms of Support

In order to help you implement the new GCSE Design and Technology: Textiles Technology Specification effectively, OCR offers a comprehensive package of support. This includes:

Published Resources

OCR offers centres a wealth of quality published support with a fantastic choice of 'Official Publisher Partner' and 'Approved Publication' resources, all endorsed by OCR for use with OCR specifications.

Publisher partners

OCR works in close collaboration with three Publisher Partners; Hodder Education, Heinemann and Oxford University Press (OUP) to ensure centres have access to:

- Better published support, available when you need it, tailored to OCR specifications
- Quality resources produced in consultation with OCR subject teams, which are linked to OCR's teacher support materials
- More resources for specifications with lower candidate entries
- Materials that are subject to a thorough quality assurance process to achieve endorsement

Hodder Education is the publisher partner for OCR GCSE Design and Technology: Textiles Technology.



Hodder Education is producing the following resources for OCR GCSE Design and Technology: Textiles Technology for first teaching in September 2009, which will be available in Spring 2009.

OCR Textiles Technology for GCSE Student's Book -

Jayne March, Maria James, Carey Clarkson, Editor: Bob White

ISBN: 978 0340 98199 3 Published: 27/03/2009

OCR Design and Technology for GCSE Dynamic Learning Network Edition CD-ROM

ISBN: 978 0340 98203 7 Published: April 2009

Approved publications

OCR still endorses other publisher materials, which undergo a thorough quality assurance process to achieve endorsement. By offering a choice of endorsed materials, centres can be assured of quality support for all OCR qualifications.



Endorsement

OCR endorses a range of publisher materials to provide quality support for centres delivering its qualifications. You can be confident that materials branded with OCR's "Official Publishing Partner" or "Approved publication" logos have undergone a thorough quality assurance process to achieve endorsement. All responsibility for the content of the publisher's materials rests with the publisher.

These endorsements do not mean that the materials are the only suitable resources available or necessary to achieve an OCR qualification. Any resource lists which are produced by OCR shall include a range of appropriate texts.

OCR Training

A full range of training events provide valuable support, for the delivery and assessment of OCR qualifications:

Get Ready...

An overview of new OCR specifications

Get Started...

For teachers preparing to deliver or already delivering OCR specifications

Get Ahead...

For teachers wanting to improve delivery and assessment of a current OCR specification

Lead the way...

To encourage creativity and innovation

View up-to-date event details and make online bookings at www.ocr.org.uk or view our new training e-books at www.ocr.org.uk/training. If you are unable to find what you are looking for contact us by e-mail training@ocr.org.uk or telephone 02476 496398.

e-Communities

Over 70 e-Communities offer you a fast, dynamic communication channel to make contact with other subject specialists. Our online mailing list covers a wide range of subjects and enables you to share knowledge and views via email.

Visit https://community.ocr.org.uk, choose your community and join the discussion!

Interchange

OCR Interchange has been developed to help you to carry out day to day administration functions online, quickly and easily. The site allows you to register and enter candidates online. In addition, you can gain immediate a free access to candidate information at you convenience. Sign up at https://interchange.ocr.org.uk

Frequently Asked Questions

Unit A571: Introduction to designing and making

Is this a compulsory unit?

This unit is compulsory for a GCSE in Design and Technology: Textiles Technology (J307). It is also one of two units that must be studied for a GCSE (Short course) in Design and Technology: Textiles Technology (J047).

What is this unit worth?

This unit is worth 30% of the GCSE in Design and Technology: Textiles Technology (J307) qualification and 60% of the GCSE (Short course) in Design and Technology: Textiles Technology (J047)

What is the entry code for this unit?

The entry code for this unit is A571.

How is this unit assessed?

This unit is assessed by a 20 hour controlled assessment task. This unit is internally marked and externally moderated. Teachers should use the published marking criteria for Unit A571. Moderation takes place postally or via the OCR Repository.

Will candidates be able to re-sit the unit?

Yes. Candidates may re-sit this unit once before entering for certification for a GCSE or GCSE (Short course), with the highest score counting towards the qualification.

Is there a text book for this unit?

Yes. The recommended text book is GCSE Design and Technology: Textiles Technology published by Hodder. This book covers all four units of the GCSE in Design and Technology: Textiles Technology (J307) qualification and the two units required for a GCSE (Short course) in Design and Technology: Textiles Technology (J047).

Is there training available for this unit?

Yes. OCR provide a full programme of training for Design and Technology: Textiles Technology (J307 and J047). Details are available on the OCR website.

Unit A572: Sustainable design

Is this a compulsory unit?

This unit is compulsory for a GCSE in Design and Technology: Textiles Technology (J307). It is also one of two units that must be studied for a GCSE (Short course) in Design and Technology: Textiles Technology (J047).

What is this unit worth?

This unit is worth 20% of the GCSE in Design and Technology: Textiles Technology (J307) qualification and 40% of the GCSE (Short course) in Design and Technology: Textiles Technology (J047) qualification.

What is the entry code for this unit?

The entry code for this unit is A572.

How is this unit assessed?

This unit is assessed by a 60 minute written test. The test is externally set and marked.

What is the structure of the test?

The test is divided into sections A and B. Section A consists of fifteen short answer questions. Section B consists of three questions requiring answers that may involve sketching, annotation, short sentences or more extended writing. Each of the section B questions is worth 15 marks.

Is the test tiered?

No. All candidates take the same test.

How many times can the test be taken?

This test can be taken twice, with the highest score counting towards the qualification.

Are exemplar test questions available?

Yes. Exemplar questions are available on the OCR website and past test papers will also be made available on the website.

Is there a text book for this unit?

Yes. The recommended text book is GCSE Design and Technology: Textiles Technology published by Hodder. This book covers all four units of the GCSE in Design and Technology: Graphics (J307) qualification and the two units required for a GCSE (Short course) in Design and Technology: Textiles Technology (J047).

Is there training available for this unit?

Yes. OCR provide a full programme of training for Design and Technology: Textiles Technology (J307 and J047). Details are available on the OCR website.

Unit A573: Making quality products

Is this a compulsory unit?

This unit is compulsory for a GCSE in Design and Technology: Textiles Technology (J307). It **cannot** be taken as part of the GCSE (Short course) in Design and Technology: Textiles Technology (J047).

What is this unit worth?

This unit is worth 30% of the GCSE in Design and Technology: Textiles Technology (J307) qualification.

What is the entry code for this unit?

The entry code for this unit is A573.

How is this unit assessed?

This unit is assessed by a 20 hour controlled assessment task.

Can students produce designs on a computer?

Yes. It is expected that candidates will use computer based methods and traditional hand skills to generate design proposals.

Is this unit assessed by a visiting moderator?

No. Candidates are required to take a minimum of two clear photographs of the product, which must be included in the design folder. The moderator will then request a sample of folders. Moderation takes place postally or via the OCR Repository.

Unit A574: Technical aspects of designing and making

Is this a compulsory unit?

This unit is compulsory for a GCSE in Design and Technology: Textiles Technology (J307). It **cannot** be taken as part of the GCSE (Short course) in Design and Technology: Textiles Technology (J047).

What is this unit worth?

This unit is worth 20% of the GCSE in Design and Technology: Textiles Technology (J307) qualification.

What is the entry code for this unit?

The entry code for this unit is A574.

How is this unit assessed?

This unit is assessed by a 75 minute test. The test is externally set and marked.

Which part of the specification do I need to look at to prepare my candidates for this exam?

Refer to pages 15 to 21 of the specification.

What kind of things will the examination be about?

The examination will test candidate's knowledge and understanding of fibres and fabrics, pre manufactured components, tools and equipment.

When can I enter candidates for this exam?

January or June.

Do Short course candidates take this paper?

No.

What is the structure of the test?

The paper has five questions, each worth 12 marks. It is divided into two sections.

<u>Section A</u> – three questions in a similar format to the old specification based on the technical aspects of designing and making.

<u>Section B</u> – two questions, one requiring a design response, the other written and reflecting the wider aspects of sustainability and human use.

Is the test tiered?

No. All candidates take the same test.

How many times can the test be taken?

This test can be taken twice, with the highest score counting towards the qualification.

Are exemplar test questions available?

Yes. Exemplar questions are available on the OCR website and past test papers will also be made available on the website.

Is there a text book for this unit?

Yes. The recommended text book is GCSE Design and Technology: Textiles Technology published by Hodder. This book covers all four units of the GCSE in Design and Technology: Textiles Technology (J307) qualification.

Is there training available for this unit?

Yes. OCR provide a full programme of training for GCSE in Design and Technology: Textiles Technology (J307). Details are available on the OCR website.

www.ocr.org.uk

OCR customer contact centre

General qualifications

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