



DISTANCE LEARNING
in Cosmetic Science



INTRODUCTION AND GUIDE TO THE

Diploma in Cosmetic Science

Available on a National and International basis by
The Society of Cosmetic Scientists.




INTRODUCTION AND GUIDE TO THE

Diploma in Cosmetic Science


MODULES AND UNITS

Module One




Unit 1	Basic Chemistry
Unit 2	Analytical Chemistry
Unit 3	Colloid and Interface Science
Unit 4	Cell Physiology and Physiology
Unit 5	Biochemistry
Unit 6	Basic Microbiology
Unit 7	Oils, Fats and Waxes
Unit 8	Surfactants
Unit 9	Gums, Thickeners and Resins
Unit 10	Emulsions
Unit 11	Skin Biology
Unit 12	Hair and Hair Follicle Structure

Module Two



Unit 13	Perfumery
Unit 14	Oral Hygiene
Unit 15	Hair Products
Unit 16	Skin Products
Unit 17	Decorative Cosmetics

Module Three



Unit 18	Packaging
Unit 19	Production
Unit 20	Quality Assurance
Unit 21	Product Stability
Unit 22	Aerosols
Unit 23	Industrial Microbiology

Module Four



Unit 24	Legislation
Unit 25	Product Evaluation
Unit 26	Statistics for Product Evaluation
Unit 27	Product Safety
Unit 28	Consumer and Market Research
Unit 29	Claim Substantiation
Unit 30	Marketing
Unit 31	Product Development

1 The Society of Cosmetic Scientists

The SCS is the professional body for scientists working in the cosmetics, toiletries, perfumery and allied industries.



The SCS promotes education, research and collaboration to advance the science of cosmetics.

The Society endeavours to do this by attracting individuals with high scientific qualifications and experience in the cosmetics industry to become members of the SCS.

The SCS also advances cosmetic science through its publications, educational programmes and scientific meetings.

The Society has well over 1,000 members and does not admit corporate membership. It was first formed on 7 October 1948 and has grown steadily from that date. It is one of the original members of the International Federation of Societies of Cosmetic Chemists (IFSCC) formed in 1959 which now numbers over 40 societies.

Cosmetic Education

The Education aims of the Society are:

1. To advance the science of cosmetic and toiletries.
2. To provide the means for the dissemination and interchange of knowledge pertinent to cosmetic and related sciences.
3. To promote high ethical standards in cosmetic science.
4. To improve the professional status of members.
5. To encourage education and research in cosmetic and related sciences.

To further these aims the Society has provided a variety of courses and has been the leading authority in the organisation and carrying out of scientific educational programmes in the many fields of cosmetic science at all levels.

Academic Standard

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Another major way in which the Society has pursued these aims since 1948 has been to offer a part-time Diploma in Cosmetic Science. The course has succeeded in providing an employment-led and competence-based education for persons employed in the cosmetic, toiletries and allied industries, giving an integrated knowledge of the fundamentals of cosmetic science and the industry.

The award of the Diploma leads to membership of the Society. In recent years the Diploma in Cosmetic Science is available on line and on an international basis by distance learning. The present diploma course is endorsed by the Cosmetic, Toiletry and Perfumery Association (CTPA) and recommended by leading companies involved in the cosmetics and toiletries industry.



3 What is Distance Learning?

Distance Learning is a system of study which you can use without having to attend a series of lessons or lectures, given in the traditional way at a college or training centre. It is a system in which you can study on your own, at your own pace and at a time and place of your choice. You no longer have to spend more time travelling to an evening class than actually studying. You are not held up by the slowest member of the class nor left behind if you need more time to understand. If you want to study in your home, at weekends, whilst travelling, before, during or after work, you can. If you want to study at regular times, or fit it between all your other commitments, you can.

To enable you to do this, the producers of the Diploma in Cosmetic Science have reproduced all the modules and the accompanying audio and videotapes as an on-line course, in order to provide the most effective and efficient self-instructional package possible.

In this way we have tried to give you maximum flexibility in controlling your learning while satisfying the needs of the Industry and the Society.

Pre-requisites

It is expected that you will have two science A-Levels, one of which must be in Chemistry, or equivalent.

The course commences with Basic Science units. If you have a science degree, you will find these units useful for revision; if you do not have such qualifications, you may find these units essential. We recognise that you may have worked in the industry for some time or be expert in a particular area and so find one or more of the units undemanding. Similarly, we anticipate that despite your background, qualifications and experience, there are likely to be units which you will find challenging.

The Diploma in Cosmetic Science is a vocational course and so complements many academic backgrounds, giving a final qualification tailored to the specific needs of the cosmetic industry.

In addition each applicant should have a minimum of a GCSE grade C, or equivalent, in Mathematics and English. Overseas students who do not have English as a first language should have passed the IELTS test with an overall mark of 6.5, or an equivalent qualification.

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5 The Course

The course consists of four modules. These modules may be accessed through the Distance Learning in Cosmetic Science website: www.scsdlc.com. Module One is designed to be studied during the Autumn Term, Modules Two and Three during the Spring Term and Module Four during the Summer Term.

Module One – *Basic Principles of Cosmetic Science*

The first module introduces students to the following underpinning sciences in their various relevant forms, together with safety aspects in the workplace. Raw materials form an important part of the basic ground work and certain specialist areas are fed into this part together with the structure of skin and hair.

Module One

- Unit 1 Basic Chemistry
- Unit 2 Analytical Chemistry
- Unit 3 Colloid and Interface Science
- Unit 4 Cell Physiology and Physiology
- Unit 5 Biochemistry
- Unit 6 Basic Microbiology
- Unit 7 Oils, Fats and Waxes
- Unit 8 Surfactants
- Unit 9 Gums, Thickeners and Resins
- Unit 10 Emulsions
- Unit 11 Skin Biology
- Unit 12 Hair and Hair Follicle Structure

Module Two – *Formulation*

Module Three – *Manufacture and Control*

In Modules Two and Three the emphasis is on formulation and manufacture. It therefore encompasses hair products, skin products, cleansing agents and decorative cosmetics, together with the manufacturing of cosmetics and toiletries, which will include production and packaging.

Module Two

- Unit 13 Perfumery
- Unit 14 Oral Hygiene
- Unit 15 Hair Products
- Unit 16 Skin Products
- Unit 17 Decorative Cosmetics

Module Three

- Unit 18 Packaging
- Unit 19 Production
- Unit 20 Quality Assurance
- Unit 21 Product Stability
- Unit 22 Aerosols
- Unit 23 Industrial Microbiology

Module Four – *Perfecting the Product*

This final part is concerned more with use of the finished product and includes legislation and product safety. It also gives due consideration to the market place and how these products might be received, thereby dealing with environmental impact, marketing issues, consumer research, product evaluation, statistics and claim support.

Module Four

- Unit 24 Legislation
 - Unit 25 Product Evaluation
 - Unit 26 Statistics for Product Evaluation
 - Unit 27 Product Safety
 - Unit 28 Consumer and Market Research
 - Unit 29 Claim Substantiation
 - Unit 30 Marketing
 - Unit 31 Product Development
- Folder containing Past Exam Papers

In the Autumn term we run an informal induction to the course over a buffet lunch at SCS Formulate, our annual conference event. In the Spring Term we hold a "Lab Day" in London for those that may not have access to a laboratory in order for them to experience making various products. During the Summer Term we organise a weekend Summer School for revision purposes before the exams.

At the end of the course students will have a thorough and up-to-date knowledge of raw materials and products in the cosmetics, toiletries and allied industries and be able to:

Work with a high degree of independence, evaluate and use appropriate materials, processes and equipment, be competent in problem identification, making decisions and developing strategies, retrieve information from a range of sources and critically review it, organise and manage their work as an individual and as part of a team.

Students should also have:

A responsible attitude to product safety and safe practices, and be fully versed in the principles of good manufacturing practice.

They will be competent in the application of scientific principles to the formulation, production and packaging of cosmetic and toiletry products. Have the ability to evaluate cosmetic safety and efficacy, a full understanding of regulatory and quality guidelines with respect to cosmetic and toiletry products, an appreciation of the marketing of cosmetics and toiletries and an understanding of marketing trends and a knowledge and regard for the impact of the industry on the environment.

Key skills

Students should be able to obtain, interpret, apply and communicate technical information. Apply mathematical and statistical procedures, demonstrate an appropriate level of computer literacy, solve relevant problems and manage their own work effectively.

6 Studying the Modules

Each module that constitutes the SCS Distance Learning Course is based on a series of units, this will contain the majority of the teaching material and will direct you to all the other components of the modules. These units are now reproduced on on-line. Students may either study from their computer screens or print out each section as it is required. The course is completely cross referenced with student computer interactive activities and tests.

On each unit's home page you will find information on the content of the unit, our estimate of how the study time is likely to be allocated, a diagrammatic representation of the structure and sequence of the content, as well as notes on a suggested working order. Each section of the unit will typically start with a clear statement of its aim, while a series of checklist items (objectives) will be positioned at the end of the section and be flagged in the margin by a large tick. You can refer to the checklist at any time in your study. You may decide to look at it before you even begin studying the section in case your background and experience is such that you do not need to study this material. Alternatively, you could complete your study of the section and use the checklist to assess your understanding before you continue your study. Of course, if after studying the material you find you are unable to satisfactorily complete the checklist items, you would be advised to return to the module and repeat the section.

The Diploma in Cosmetic Science has been designed so that self-assessment is a central and integral part of the course. The objectives and competencies of each unit are assessed using questions and activities to check your understanding and monitor your progress.

They are identified by two bold lines across the page: one to denote its start and the other its end. In the margin you will either see a series of question marks or you will see a Key Activities sign that directs you to the website where you can complete your on line activity. In addition some units include video clips of lab demonstrations as part of the activity.

In other sections you will be asked to read extracts from books, articles or technical reports.



7 Time

The Diploma in Cosmetic Science runs for one full year, beginning in September, and involves approximately 300 hours of guided study. While the actual amount of study time devoted to the course each week is up to you, this represents about 10 hours of guided study per week during this period. The examinations take place during late summer. You can defer your exams for a year and spread the coursework over two years.

The Society realises that those people studying the course will bring their own unique combination of interests, experiences and abilities which will result in some modules being studied in less time – others may require more.

8 Student Support

The course has been designed to be self-instructional, self-contained and not dependent upon a teacher for elaboration or explanation. It has been prepared through a series of drafts and refined after a complete field trial with representative samples of students. Regular tutorials, therefore, are not necessary but can be arranged upon student demand. We also can offer each student a "Course Tutor", a person from within the industry who understands the course and can offer advice and act as a form of mentor.

However, we recognise that occasionally problems do arise for which a personal explanation is helpful. As a result, if you have any problems whatsoever you are to contact the Course Manager immediately and they will sort the problem out.

We shall also give you the opportunity, but only with your written permission, to share your telephone number with fellow students. This is entirely voluntary but does offer the chance to talk to other students on the course who may have similar interests to yours or be experiencing similar difficulties. It might help to share information and resolve problems.

Assessment

Continuous assessment is provided by four assignments. Two essays, that each represent 10% of the total course assessment and two case studies that each represent 7.5% of the total course assessment.

The remaining and final assessment takes the form of four hand written formal two hour examination papers covering all the modules of the course. These exams can be taken at an exam centre near you.

Application Forms

You may visit our website and apply on line at www.cosmeticlearning.com

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11 Course Unit Information

Module	Unit	Title/Author	Study Time (hours)
1			
	1	Basic Chemistry – <i>Chris Leahy</i>	5
	2	Analytical Chemistry – <i>Ken Spears</i>	5
	3	Colloid and Interface Science – <i>Kevan Hatchman</i>	10
	4	Cell Physiology and Physiology – <i>Lyn Goldberg</i>	10
	5	Biochemistry – <i>David Peers*</i>	10
	6	Basic Microbiology – <i>Joan Thomas</i>	5
	7	Oils, Fats and Waxes – <i>Mark Leonard</i>	5
	8	Surfactants – <i>Kevan Hatchman</i>	10
	9	Gums, Thickeners and Resins – <i>Ken Daykin, updated by Daksha Patel</i>	5
	10	Emulsions – <i>John Knowlton, updated, by Stephen Boothroyd</i>	12.5
	11	Skin Biology – <i>Grace Abamba, updated by Paul Mouser</i>	6
	12	Hair and Hair Follicle Structure – Hugh Rushton, Dr Chris Gummer, revised by Dr Gill Westgate	10
2			
	13	Perfumery – <i>Tony Curtis, updated by Marianne Martin</i>	20
	14	Oral Hygiene – <i>Tony Morton, updated by Ian Marlow and Julia Heywood</i>	10
	15	Hair Products – <i>Hugh Rushton, Shona Miller and Robert Hefford</i>	10
	16	Skin Products – <i>Grace Abamba updated by Paul Hebditch and John Woodruff</i>	14
	17	Decorative Cosmetics – <i>Keith Capper, updated by Pauline Ayres</i>	20
3			
	18	Packaging – <i>Dennis Hine, updated by Anne Emblem</i>	20
	19	Production – <i>John Tainton</i>	20
	20	Quality Assurance – <i>Elma Charalambous and Peter Teige</i>	10
	21	Product Stability – <i>John Knowlton</i>	5
	22	Aerosols – <i>Len MacNair, updated by Adrian McCretton</i>	10
	23	Industrial Microbiology – <i>Joan Thomas</i>	10
4			
	24	Legislation – <i>Debra Redbourn</i>	5
	25	Product Evaluation – <i>Joyce Ryan</i>	10
	26	Statistics for Product Evaluation – <i>Joyce Ryan</i>	10
	27	Product Safety – <i>Marion Roberts, updated by Stephen Kirk</i>	10
	28	Consumer and Market Research – <i>Neil Harding</i>	10
	29	Claim Substantiation – <i>Margaret Batt, Ian Marlow, Cristelle Sladen, Amanda Hill, updated by Stephen Barton</i>	10
	30	Marketing – <i>Kathryn Lewis and Jean Graham, updated by Glennis Wade</i>	20
	31	Product Development – <i>Laurence Ashley, updated by Judi Beerling</i>	5

* With Grace Abamba, Angela Beattie, David Benzies,
Rachel Benzies and Brian Knights

General acknowledgements

Each unit contains a list of acknowledgements that is specific to that unit.

In addition, the following have made a substantial contribution to the course as a whole, either in writing materials or assisting with production.

Funding Body

Society of Cosmetic Scientists

Advice and Assistance

The Cosmetic, Toiletry & Perfumery Association Limited

Consultants

Fred Lockwood

Ray Jones

Graphic Design

Thumbprint, Luton





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First published 1994. Copyright © 1996 Revised 2016. Society of Cosmetic Scientists
Printed in the United Kingdom