

The Diploma in Gemmology Course



Copyright © 2009

All rights reserved. No part of this work may be copied, reproduced, transferred, or transmitted in any form or by any means, nor be translated into any human or computer language without the written permission of Gem-A.

All photos are the copyright of Gem-A unless otherwise indicated.

Gem-A, The Gemmological Association of Great Britain

27 Greville St
London
EC1N 8TN

www.gem-a.com

Acknowledgments:

Editor and Project Director – Lorne Stather

Research and advice on content – Maggie Campbell Pedersen, Pat Daly, Doug Garrod, Ian Mercer, Claire Mitchell, Cally Oldershaw; Editorial support – Mary Burland; Photography – Pat Daly, Doug Garrod, Bob Maurer, Jack Ogden; Graphics – Jack Ogden. Special thanks are due to the Natural History Museum, London and the International Colored Gemstone Association (ICA) for their generous permission to use photographs from their extensive photo libraries. Other illustrations are as individually credited.

Gem-A wishes to express its sincere gratitude to those organisations, companies and individuals who through our 2008 educational appeals helped to provide the additional finance for developing this course, including: the Accredited Gemologists Association (USA), Joerg Baudendistel (Germany), The Canadian Gemmological Association (Canada), Terry Davidson (UK), David Gann LTD (UK), Roger Harding (UK), Andrew Hinds (UK), Shinko Katayama (Sri Lanka), Harold Killingback UK, Mohammed Idris Jabir (Malaysia), Sanallah Khan (Pakistan), Bob Maurer (UK), Jack Ogden (UK), Helen Plumb (UK), James Riley (UK), Simon Stoodley (UK), Unni Trolle (Sweden), John Vince (UK) The Scottish Branch of Gem-A (UK), the Indian Diamond Institute (India), Benjamin Zucker (USA), and others who prefer to remain anonymous

Gemmology Course Contents



Foundation Notes:

- 1 **Gems and Gemmology**
- 2 **Observation and Magnification**
- 3 **Materials and Structure**
- 4 **Durability**
- 5 **Weight, Density and Specific Gravity**
- 6 **Light and Optics**
- 7 **Colour**
- 8 **Other Gem Properties**
- 9 **The Geology of Gems**
- 10 **The Gemstone Pipeline**
- 11 **Fashioning Gemstones**
- 12 **Gems and Jewellery**
- 13 **Treatments**
- 14 **Imitations, Simulants and Synthetics**
- 15 **The Gemstones**

Diploma Notes:

-
- D2 **Observation and Magnification**
- D3 **Materials and Structure**
- D4 **Durability**
- D5 **Weight, Density and Specific Gravity**
- D6 **Light and Optics**
- D7 **Colour**
- D8 **Other Gem Properties**
- D9 **The Geology of Gems**
-
- D11 **Fashioning Gemstones**
-
- D13 **Treatments**
- D14 **Imitations, Simulants and Synthetics**
- D15 **The Gemstones**

Introduction

Welcome to the Gem-A Diploma in Gemmology course, we hope you enjoy your studies.

How do the Foundation and Diploma notes work together?

The Diploma notes are designed to follow on from the material supplied to you in your Foundation course. You no longer need the title and contents page from your Foundation notes as these pages now supersede these.

For the main course notes you will see the section numbers in the Diploma directly relate to the Foundation. Each Diploma section should be inserted at the back of the corresponding Foundation section to complete your notes.

Further instructions relating to the gemstones notes in section D15 can be found in the introduction for this section.

Missing sections?

There are three Foundation sections (1, 10 and 12) that do not have corresponding diploma notes, this is because the material supplied at Foundation level in these subject areas is sufficient for this course.

The Diploma Syllabus

It is worth keeping in mind that the Diploma examination syllabus includes the Foundation syllabus and that the information covered in the Foundation is an essential building block for the Diploma material.

Further information

For more information about the Diploma syllabus and exam help see www.gem-a.com or use the on-line education area which can be found at: e-learning.gem-a.com (please note you do not need to add www in front of this address).

Information available in the on-line area:

- past examination papers
- examiners reports
- course specifications
- glossary of terms
- education forums
- further links and tips for on-line research.

Gem-A membership

Gemmology is a continually developing subject, providing new discoveries and new challenges, and membership of Gem-A is vital in enabling you to expand your knowledge of gems, to keep you up-to-date with the latest developments and to help you stay in contact with other gem enthusiasts. As a member of Gem-A, you are part of our international community of gem enthusiasts and professionals and you also receive our publications. Anyone with an interest in gemstones, whether or not they are in the gem and jewellery trade, may apply for membership of the Association. Those who have already qualified in Gem-A's Gemmology or Gem Diamond Diploma examinations may apply for the prestigious membership status designations of Fellowship or Diamond Membership respectively, and will be entitled to use the initials FGA or DGA after their name while they are members of The Gemmological Association of Great Britain.