INTRODUCTION TO GEMS AND GEMMOLOGY

COURSE SYLLABUS

COURSES 2013

Lecture 1 - Tuesday    12/3/2013    Ms. Dana Causer F.G.A.A.
THIS LECTURE 2.5 Hours – Start Time 7:00 p.m.

Properties of Gemstones. Classification of minerals/gemstones, chemical, physical and optical properties, crystals, refractive index, specific gravity, hardness, lustre, cleavage etc. and inclusions.

Start Time  7.00 p.m.

LAB session - introduction to Gem Identification instruments including refractometer, Gem microscopes, ultra violet lamp, hydrostatic balance, polariscope, dichroscope, diamond probe Chelsea filter, spectroscope and hand lens. How and why they are used.

Lecture 3 - Monday    18/3/2013    Mr. Tom Troiani  F.G.A.A.
Start Time  7:30 a.m.

SILICA GEMSTONES - introduction to earths most common gem minerals including QUARTZ varieties, Amethyst, Citrine, Smoky and Rock Crystal, and cryptocrystalline quartz varieties including Agate, Chrysoprase, Onyx, Carnelian etc. Non crystalline varieties - Obsidian etc.

Lecture 4 - Thursday   21/3/13    Ms. Annie Dursun F.G.A.A., Dip. D.T.
Start Time  7:00 p.m.

SECOND LAB CLASS

Lecture 5 – Monday    25/3/2013    Mr. Bob Bubeck  F.G.A.A.
Start Time  7.30 p.m.

CORUNDUM (Sapphire and Ruby) and BERYL (Aquamarine, emerald etc.) – World’s most popular coloured gemstones, includes star stones and a wide variety of colours.

Lecture 6- Tuesday    26/3/2013    Ms. Laura Brehaut F.G.A.A.
Start Time  7.30 p.m.

DIAMOND – World’s most popular gemstone and it is found in almost every colour. Important properties include hardness, lustre, brilliance of the cut stone, clarity, heat conductivity; some of which vary with type. World’s largest coloured diamond producing mine is Argyle in Western Australia.

Easter holiday March 29 through April 1.
Start Time  7.30 p.m.

OPAL – Australia’s national gemstone and one of our important exports. Varieties include white, black, crystal, jelly, matrix, boulder and Mexican fire opal. Composite stones - doublet, triplet. Synthetic and imitation. Australian localities.

Lecture 8 – Tuesday     9/4/2013     Ms. Dana Causer F.G.A.A.
Start Time  7.30 p.m.

SYNTHETICS and SIMULANTS - many gemstones are synthesised in a factory and have the same properties as natural gemstones. Some gemstones are imitated by natural or manufactured materials which are nothing like the natural gems they imitate except in colour.

Lecture 9 – Monday     15/4/2013     Mr. Des Bumpstead  F.G.A.A.
Start Time  7.30 p.m.

COLOURED GEMS 1 - Garnets, Chrysoberyl, Topaz and Zircon. Includes cat’s eyes. Often used to imitate.

Lecture 10 – Tuesday     16/4/2013     Mr. Des Bumpstead  F.G.A.A.
Start Time  7.30 p.m.

COLOURED GEMS 2 - Tourmaline, Spinel, Peridot and Spodumene. Tourmaline and Spinel can be found in a large range of colours and can be used to imitate other gems.

Start Time  7.30 p.m.

ORNAMENTAL GEMS - ORGANIC GEMS - Some gems are not, strictly speaking, gemstones, having formed as a by product of the living processes of certain organisms and include Pearl, Amber, Jet, Coral and Ivory.

Start Time  7.30 p.m.

ORNAMENTAL GEMS – MINERALS, ROCKS & LAPIDARY - many gemstones have a long history of use including Lapis Lazuli, Turquoise and Jade. Lapidary is the craft of polishing gems.

NOTES
1. Information for Diploma in Gemmological Studies course and other courses offered by the Gemmological Association of Australia described to students at end of LECTURE 12.
2. Change of lecturers and rotation of lectures may occur within the course.
3. Each course proceeds subject to a minimum number of students.
4. Intending students should be aware that for a fee of $65.00 N.M./$55 M. they may attend any one class of their choice, when they do not wish to attend the whole course (12 classes) at a cost of $475.00 (Members $350.00) e.g. if you have an interest in OPAL then attendance at this lecture may suit your personal interests).