

Diploma in Gemmology: Year 1

EOS203 Gemstone Properties and Instrumentation for their Determination

Specific Gravity measurements; Use of hand lens, stereo microscope and polarising microscope; Refractometer; UV short and long wave lamp; Dichroscope; Polariscope; Conoscope; Spectroscope and absorption spectra of gemstones; Laser Raman demonstration. [Lectures and practicals].

Assessment: Continuous Assessment & Written Examination

Weighting: 5 ECTs

Reading List

Gemmology, P. Read, (2005), Elsevier

Gemology, Hurlbut and Kammerling, (1991), Wiley, New York

Gemstones of the world, W. Schumann, (1997), New York, Sterling Publication Co.

Identification of Gemstones, (2003), M. O'Donoghue & L. Joyner, Butterworth Heinemann

Mineral Science, Cornelius Klein, Wiley & Sons. ISBN 0-471-25177-1

Tables of Gemstone Identification, (Ed 2010), Hervé Nicolas Lazzarelli

A students' guide to spectroscopy, Colin H. Winter., OPL Press

EOS204 Recording Natural Gemstone Properties

Handspecimen studies of natural and synthetic gemstones. Recording the properties of gem varieties from the following mineral groups: Beryl, Corundum, Diamond, Feldspars, Garnet, Olivine, Silica, Zoisite (Tanzanite), Topaz, Tourmaline. [Lectures and practicals and a fieldtrip].

Assessment: Continuous Assessment & Written Examination

Weighting: 5 ECTs

Reading List

Gemstones of the world, W. Schumann, (1997), New York, Sterling Publication Co.

Identification of Gemstones, (2003), M. O'Donoghue & L. Joyner, Butterworth Heinemann

Tables of Gemstone Identification, (Ed 2010), Hervé Nicolas Lazzarelli

Artificial Gemstones, M.J. O'Donoghue

EOS205 *Gemstones and the Commercial World*

Gemstones and Jewellery; Gemstone Cuts; Cutting Gemstones; Diamond and its simulants (e.g. cubic zirconia); Diamond Grading; Valuations; Treated Gemstones; Artificial and Synthetic Gems. [Lectures and practicals].

Assessment: Continuous Assessment & Written Examination

Weighting: 5 ECTS

Reading List

Gemmology, P. Read, (2005), Elsevier

Gemology, Hurlbut and Kammerling, (1991), Wiley, New York

Gemstones of the world, W. Schumann, (1997), New York, Sterling Publication Co.

Identification of Gemstones, (2003), M. O'Donoghue & L. Joyner, Butterworth Heinemann

Artificial Gemstones, M.J. O'Donoghue