

Course Outline 2012
PROPERTY 312: PLANT AND MACHINERY VALUATION
(15 POINTS)

Semester 1 (1123)

Course Prescription

Principles and practice of plant and machinery valuation with case studies of insurance, market, existing use and infrastructural asset valuations.

Programme and Course Advice

Prerequisite: PROPERTY 211 and 251

Goals of the Course

The objective of this course is to provide students with an understanding of the methods of approach to the valuation of plant and machinery for sale in the open market, for financial reporting purposes, and for insurance purposes.

Learning Outcomes

By the end of the course it is expected that the student will be able to:

1. Understand the difference between plant, machinery and building assets;
2. Compile schedules of plant and machinery assets that include specifications and information on value drivers;
3. Use valuation standards and apply guidelines that are specific to the valuation of plant and machinery;
4. Interpret and calculate reinstatement costs, indemnity values, inflationary provisions and demolition estimates; and
5. Value specialised assets such as infrastructure, utilities and state owned assets using published guidelines.

Content Outline

- Week 1: Introduction and plant and machinery valuation standards
- Week 2: Insurance valuations, definitions and basis
- Week 3: Insurance valuations, costs and estimates
- Week 4: Market valuations, terms and definitions
- Week 5: Market valuations, effects of age, condition, and ancillary parts
- Week 6: Valuation reports
- Week 7: Valuations of plant and machinery for financial reporting purposes
- Week 8: Specialist valuations – tax valuations
- Week 9: Valuation of monopoly assets for financial reporting purposes
- Week 10: Specialised valuations – water, drainage and roading assets
- Week 11: Specialised valuations – electricity lines businesses
- Week 12: Specialised valuations – health and education sectors

Learning and Teaching

The class will meet for three hours each week. Class time will be used for a combination of lectures, tutorial sessions, and applied discussions of current events. In addition to attending classes, students should be prepared to spend time on activities related to this course. These activities include carrying out the recommended readings, keeping up with the business press re: current issues of relevance to this course, and preparing for the assignment, test, and the final exam.

The lectures will be held from 4.00 to 6.00pm on Thursdays and 3.00 to 4.00 pm on Fridays. Lecture rooms will be advised.

Teaching Staff

Graham Barton, Registered Plant & Machinery Valuer, FPINZ, Associate Director- Valuations & Advisory with Jones Lang LaSalle will be responsible for the course. He may be assisted by Plant and Machinery Valuers and Members of the Property Institute of New Zealand to present some lectures in their specialist valuation field.

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The lecturer will also be available to answer short queries immediately after lectures end, but please remember that we have to vacate the lecture room promptly for the next lecture.

Learning Resources

Required books – The University of Auckland PROPERTY 312 Course Book 2012.

Recommended reading:

Derry CJC, *Valuation of Plant and Machinery*, College of Estate Management: UK.

Leslie H Miles, *Dimensions of Value*, (VI Ed.)

Kirit Budhhatti, *Valuation of Plant and Machinery*

Alico John, *Appraising Machinery and Equipment*, McGraw-Hill Book Company.

International Infrastructure Asset Management Manual, National Asset Management Steering Group, c/o INGENIUM.

New Zealand Infrastructure Asset Valuation and Depreciation Guidelines. National Asset Management Steering Group, c/o INGENIUM.

Commerce Commission 2004, Handbook for Optimised Deprival Valuation of System Fixed Assets of Electricity Lines Businesses.

Treasury 2007, Valuation Guidance for property, plant and equipment, including specialised items in the health and education sectors.

Standards:

International Valuation Standards Council – International Valuation Standards 2011

API/PINZ, Australia and New Zealand Valuation and Property Standards, October 2009

New Zealand Equivalent to International Accounting Standard 16, Property, Plant and Equipment (NZ IAS 16).

New Zealand Equivalent to International Accounting Standard 16, Impairment of Assets (NZ IAS 36).

Acts:

The Fire Service Act 1975 and revisions.

Assessment

Grades will be assessed on the following basis:

60 minutes mid-term test (20%)

Assignment (20%)

Final exam (60%)

The broad relationship between these assessments and the course learning outcomes is as follows:

Learning Outcome	Test	Written Assignment	Final Exam
1	X		X
2		X	X
3	X	X	X
4	X	X	X
5			X

(Note: The details set out in this outline are subject to change. Any changes will be notified in lectures.)