

Valuations

 $\mathsf{EBB} - 6 - 173$

School of the Built Environment & Architecture

Level 6

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	Short Description Aims of the Module Learning Outcomes Knowledge and Understanding. Intellectual Skills Practical Skills Transferable Skills Assessment of the Module Feedback. Introduction to Studying the Module Overview of the Main Content Overview of the Main Content Overview of Types of Classes Importance of Student Self-Managed Learning Time The Programme of Teaching, Learning and Assessment. Learning Resources Core Materials

1. MODULE DETAILS

	6 EBB – 6 – 173 20 CAT points
Student Study Hours:	161
Contact Hours:	
Private Study Hours: Pre-requisite Learning (If applicable): Co-requisite Units (If applicable):	Included in Student Study Hours None None
Course(s):	PG Dip/MSc Real Estate, PG Dip/MSc Property Development & Planning
Year and Semester	1/1
Module Coordinator:	Scott King
MC Contact Details (Tel, Email, Room)	020 7815 7336, <u>kingsb@lsbu.ac.uk</u> , T503
Subject Area: Summary of Assessment Method: External Examiner:	Construction, Property & Surveying Coursework, class test Keith Lown

2. SHORT DESCRIPTION

This unit is intended to allow the theoretical knowledge gained in a series of lectures and workshops to be applied in practice. The unit will consider the fundamental principles of valuation, valuation formulae and discounted cash flows. It will examine the methods used in the valuation of office, retail, industrial and residential properties. The unit will also introduce the process of development and redevelopment of property.

3. AIMS OF THE UNIT

The aim of this unit is to provide the student with an understanding of the main methods of valuation which are currently used through the use and application of these techniques. The unit also gives the student an understanding of the place of property in the investment market and the alternative forms of investment.

4. LEARNING OUTCOMES

4.1 Knowledge and Understanding

understand the structure of the property industry, the property development process and the roles of the principal participants

understand valuations mathematics including the principles of compounding and discounting;

understand different types of tenure in property and how different interests are valued;

undertake valuations using relevant valuation methods;

undertake development appraisals using cash flow and discounted cash flow approaches;

undertake discounted cash flows approaches to ascertain the feasibility of investments;

4.2 Intellectual Skills

assemble information and data from a variety of sources and discern and establish connections;

identify and critically analyse issues with reference to pertinent argument and evidence;

appraise complex and unfamiliar problems and apply professional judgement in order to devise solutions and/or contribute to decision making by construction industry clients;

4.3 Practical Skills

collect, analyse and use property related data for the purposes of valuation and appraisal;

select and use valuation and appraisal techniques in a property context

4.4 Transferable Skills

effectively communicate complex ideas, information and data by oral, written and visual means in a form appropriate to the intended audience;

solve problems and make decisions;

learn effectively and independently

5. <u>ASSESSMENT OF THE UNIT</u>

The unit will be assessed by:

- 1. A one-hour test
- 2. A seminar presentation.

The test will take place in week 13 and it will cover material studied from weeks 1 to 11.

Seminar presentations will be for 15 minutes on one of the questions contained in the module guide in section 11. Students can choose the way in which they present the question they decide to attempt. This is an opportunity to be creative and effective in

communicating. A hard copy of your presentation should be prepared and given to the person marking it immediately before the presentation.

Once you have given your presentation please email a copy of it to <u>kingsb@lsbu.ac.uk</u> You need to name the file as follows:

Your name Valuation Seminar Presentation Question Number

An example of this would be:

John Smith Valuation Seminar Presentation Question 1

Marks for each element of assessment as a contribution to the overall unit mark are as follows:

Test:	60%
Seminar Presentation:	40%

6. <u>FEEDBACK</u>

Feedback will normally be given to students 15 working days after the submission of an assignment. Where possible, submissions will be anonymously marked.

7. INTRODUCTION TO STUDYING THE UNIT

7.1 Overview of the Main Content

Objectives of land ownership. The main types of landed property interests.

Methods of valuation: comparison, investment, residual, profits, contractors.

Valuation mathematics: compound interest, present value of £1, amount of £1 per annum, years purchase in perpetuity, years purchase single rate, years purchase dual rate adjusted for tax, years purchase of a reversion to a perpetuity.

Valuation formulae

Valuation of freehold and leasehold interests.

Contemporary valuation and investment appraisal techniques: discounted cash flow, net present value, interpolation, internal rate of return.

7.2 Overview of Types of Classes

Usually a concept will be delivered in a lecture and understanding of the concept will be developed during workshop and seminar sessions. The activities in workshops will include exercises and problem solving. In seminars, students will be required to give a presentation of 15 minutes.

7.3 Importance of Student Self-Managed Learning Time

In order to fully understand the concepts that will be introduced in this module and to give a meaningful seminar presentation it is essential that students carry out their own studies in addition to attending lectures.

Students are expected to take responsibility in the learning and development process.

Where students identify concepts which they find difficult they are expected to discuss them with their peers in seminars. Seminars will be used for student presentations but there will also be enough time to help resolve any difficulties previously referred to.

It is expected that students that students access the Moodle site on a weekly basis for this module. Outline lecture slides will be available for each lecture and it is expected that the recommended reading is done before each class. Please be aware that the suggested texts in section 8 below are alternatives. (Choose one or two of the texts which present information in a way which you prefer).

8. <u>THE PROGRAMME OF TEACHING, LEARNING</u> <u>AND ASSESSMENT</u>

Week Topic

1 Introduction to the unit Introduction to methods of valuation

Reading

Chapters 1 & 2 Blackledge Chapters 1,3 & 8 Richmond Chapters 7,9,10,11,13 Millington Chapters 1,2& 3 Johnson, Davies & Shapiro

Valuation mathematics (1) Simple interest Compound interest – Amount of £1 The time value of money – Present Value of £1 Amount of £1 per annum

Reading

Chapter 4 Blackledge Chapter 4 Richmond Chapter 14 Millington

2 Valuation mathematics (2)

Present value of £1 per annum – Years Purchase Single Rate Annual Sinking Fund

	Deading
	Reading
	Chapter 4 Blackledge Chapter 4 Richmond Chapter 12 Millington Chapter 7 Johnson, Davies & Shapiro
3	Valuations mathematics workshop Yields Investment method of valuation (1) Valuation of freehold interests
	Reading
	Chapter 6 Blackledge Chapter 7 Richmond Chapter 15 Millington
4	Investment method of valuation (2) Valuation of freehold interests Term and reversion
	Reading
	Chapter 6 & 11 Blackledge Chapter 7 Richmond
5	Investment method of valuation (3) Full Repairing and Insuring Leases Internal repairing leases Leasehold valuations Profit rent Construction and use of Years Purchase Dual Rate Adjusted for Tax tables Return on and return of capital Remunerative rate, accumulative rate The effect of tax on the valuation of leasehold interests
	Reading
	Chapters 5 and 6 Blackledge Chapter 7 Richmond Chapter 17 and 18 Millington
6	Investment method of valuation (4) Multiple interests
7	Comparison method Units of comparison Comparable evidence Determination of rental value Determination of capital value

	Zoning
	Reading
	Chapter 10 Blackledge Chapter 4 Johnson
8	Residual method Uses Gross development value Development costs Finance costs Site acquisition costs
	Reading
	Chapter 13 Blackledge Chapter 11 Johnson Chapter 16 Johnson
9	Investment appraisal Payback Rate of return Discounted cash flow Net present value Interpolation Internal rate of return
	Reading
	Chapter 12 Blackledge Chapter 6 Richmond Chapter 19 Millington
10	Development valuations and discounted cash flows (1)
11	Contractors method Unit costs Obsolescence Profits method Annual accounts Divisible balance Rental value Capital value
	Reading
	Chapters 14 & 15 Blackledge
12	Multiple choice test briefing
13	In class test.

9. LEARNING RESOURCES

9.1 Core Materials

Blackledge, M 2009 Introducing Property Valuation, Routledge

Britton, B. Davies, K. & Johnson, T. 1989 Modern Methods of Valuation, Estates Gazette

Davidson, A 1989 Parry's Valuation and Conversion Tables, Estates Gazette

Johnson, T. Davies, K. & Shapiro E. 2000 Modern Methods of Valuation, Estates Gazette

Millington, A. 2000 Introduction to Property Valuation, Estates Gazette

Richmond, D. 1994 Introduction to Valuation, 3rd Ed. Macmillan

9.2 Optional Materials

Baum, A & Mackmin, D. 1989 The Income Approach to Property Valuation, Routledge

Enever, N & Isaac, D. 1995 Valuation of Property Investments, Estates Gazette

Scarrett, D. 1991 Property Valuation – The 5 Methods, E&FN Spon

10. SEMINAR QUESTIONS

- 1. Demonstrate the fundamental differences between the amount of £1, the amount of £1 per annum, the present value of £1, the present value of £1 per annum and an annual sinking fund.
- 2. Demonstrate how an investor can set aside funds for future liabilities. How can these figures be checked to ensure that the liabilities are met?
- 3. Years purchase single rate for 10 years at 10% does the job of present value of £1 each year for 10 years at 10%. Demonstrate and discuss.
- 4. Demonstrate how the following YP factors are calculated and the context in which each would be used:

Years purchase in perpetuity Years purchase single rate Years purchase of a reversion to a perpetuity

- 5. Demonstrate why the present value of £1 formula is applied to an income at reversion but not for the term.
- a. Assuming an interest rate of 9% how much should be paid for the right to receive an income of £30,000 p.a. for the next 5 years, followed by an income of £40,000 p.a. for 7 years followed, in turn, by an income of £50,000 pa into perpetuity.

b. Calculate the present value of the right to receive three capital sums of \pounds 150,000 to be paid at the end of 5 years, 10 years and 15 years respectively assuming a 7% rate of compound interest.

c. What is the essential difference between the income received from the two investments in a and b?

- 7. a. Using figures of your own choice to demonstrate your answer, outline the differences in approach when valuing a property let on full repairing and insuring terms and a property let on internal repairing terms only.
 - b. Explain the fundamental difference between these two valuations.
- 8. a. Using figures of your own choice, but different to those used in class, create a scenario where you value the freehold and leasehold interests in a property.

b. Discuss how the valuation of the freehold interest differs from the valuation of the leasehold interest.

- 9. 'When a landlord grants an IR lease it becomes his/her loss at the same time as it becomes the tenant's gain'.
 - a. Using figures of your own choice to illustrate, explain what is meant by this statement.

10. a. Using the correct formula, discuss and demonstrate the traditional and contemporary years purchase factors that are used for valuing a leasehold interest.

b. Comment on why two rates of interest and tax were taken into account when calculating the years purchase formula for the valuation of leasehold interests?

11.a. You have the following information concerning recent sales of freehold shops for investment purposes:

Six shops producing a total net income of £180,000 p.a. sold for £3,000,000

Ten shops producing a total net income of £210,000 p.a. sold for £3,400,000

Eight shops producing a total net income of £480,000 p.a. sold for £8,275,000

Analyse the above sales and use the results to assess the capital value of 8 freehold shops each producing a net income of £36,000 p.a.

b. You have been instructed to give your opinion of the rental value for no. 44 Kings Road which is a ground floor shop having a frontage of 7.5m and a depth of 21m. A nearby shop at no. 40 Kings Road has recently been let at a full market rental value of £48,000 p.a. It has a frontage of 9m and a depth of 18m.

Analyse this information and advise your clients.

What is the fundamental difference between these two valuations?

12. Factory A, is a 1000 square metre factory let on a 20 year lease at a rent of £18,000 per annum on internal repairing and insuring terms.

Factory B, is a 1400 square metre factory on the same estate recently let for 5 years on FRI terms at a rack rent of £35,000 per annum.

Assuming a yield of 8% for freehold interests in property let on FRI terms value the freehold and leasehold interests in Factory A.

13. A is the freeholder of a 500 square metre office block which is let to B on a lease with 20 years unexpired at a rent of £36,000 per annum. There is no provision for rent review and B is responsible for internal repairs and insurance.

A nearby office block of 700 square metres was recently let 5 years on FRI terms at a rack rent of £112,000 per annum.

Assuming a yield of 7% for similar freehold interests let on FRI terms value A's freehold interest and B's leasehold interest.

14. A is the freeholder of modern shop premises in the main shopping street of a prosperous provincial city. The property has a frontage of 6m and a depth of 28m. Sixteen years ago A let the premises to B for 21 years at a rent of £6000 per annum on FRI terms with provision for rent reviews to full rental value every 7 years. At the last rent review the rent was agreed at £35,000 per annum.

Four years after taking his lease B sublet the premises to C on the same terms but for fourteen years with provision for a single rent review to full rental value after 7 years. C now pays B a rent of £28,000 per annum.

A comparable property has been identified nearby having a frontage of 7m and depth of 17m. The property is known to have been recently let at £43,000 per annum and then sold to and investment consortium for £780,000.

Value the interest of A

- 15. Value the interest of B and C from question 15 above.
- 16. Using figures of your own choice, but different to those used in class, create a scenario where you value the freehold, leasehold and sub leasehold interests in a property.
- 17. Four houses are to be built on a site fronting a road with all services. From comparable evidence you have ascertained that houses in the area are selling for £250,000 each. They will take a year to build and the cost of constructing each house will be £65,000. The cost of borrowing is 12% p.a. Assuming design team fees at 1%, agent's fees on sale at 2% and developers profit at 20% appraise the open market value of the site. Make any further assumptions you feel are necessary.
- 18. Planning consent has been granted on a two hectare site for the development of a high tech science park. Building is restricted to 75% of the site and building will be two storeys. It is anticipated that the units will be let at £100.00 per square metre and the yield will be 10%. The scheme will take one year to complete and a further three months until the units are fully let. Finance is available at 9%. Building costs are estimated at £400 per square metre GEA.

How much should the developer pay for the site? Make any additional assumptions you think are necessary.

19. Number 20 Wharf Lane, Stoke Newington is an old warehouse which has development potential for new workshop/studio space. The warehouse is on the open market for £465,000. In good condition it would be worth £1,250,000

The rental stream for the next four years is $\pounds75,500, \pounds99,000, \pounds100,000$ and $\pounds125,000$. The estimated expenditure for the next four years is $\pounds372,000, \pounds225,000, \pounds125,000$ and $\pounds119,000$.

Your company has set a target of 10%. Will the investment show the required return?

What is the internal rate of return for the investment?

20. You have been asked to advise on the financial feasibility of renovating an industrial estate, which is for sale for £500,000. The income/expenditure profile for the scheme is as follows:

	Rental income (£)	Refurbishment cost (£)
2019		40,000
2019	30,000	80,000
2021	50,000	80,000
2022	100,000	80,000
2023	120,000	80,000

Your clients expect to sell the completed development for £750,000 in 2024. If they require a return of 14% should they proceed?

21. Using figures of your own choice demonstrate how a discounted cash flow can be used to:

- a. advise a client how much to pay for an investment
- b. calculate the internal rate of return of an investment

22. 'A discounted cash flow (dcf) is simply a more detailed investment method of valuation'.

Using the figures below, explain what is meant by this statement:

Assuming an interest rate of 10% how much should be paid for the right to receive an income of £60,000pa for the next 2 years, followed by an income of £80,000pa for the next 5 years followed by an income of £100,000 for a further 5 years.

23. a. Give a brief overview of the comparables, investment and residual methods of valuation.

b. Using figures of your own choice, give a more detailed illustration than part a. above for the Profits and Contractors methods.

11. STUDENT EVALUATION

This module was well received by the 2017/18 cohort and as a result no changes are planned for its delivery.

Due to staff illness no evaluations were taken from the 2018/2019 cohort.

Valuations

Seminar Presentation	
Name	
Question Number	
Introduction	5
Demonstrated understanding of topic	20
Contextualised the question	5
Technical accuracy	10
Effective interaction with audience	5
Ability to generate interest	5
Visual aids	5
Extended the seminar discussion beyond the question	10
Evidence of research beyond lecture notes and recommended textbooks	10
Time keeping	10
Conclusion	5
Ability to answer questions	5
Overall 'feel'	5