LIUC

Trova il futuro che ti cerca.

A86045 Accounting and Financial Reporting (2017/2018)

Session 9

Property, plant and equipment

Paul G. Smith B.A., F.C.A.

Trova il futuro che ti cerca.

SESSION 9 SESSION OBJECTIVES AND OVERVIEW

LIUC

Trova il futuro che ti cerca.

Course Overview

PGS	1. Financial reporting under IFRS	14. Construction contracts	PGS
	2. Financial analysis: Ratio analysis	15. Other Non-financial liabilities	
	3. Financial analysis: Segments and EPS	16. Review session	
	4. Review session	17. Mid term test	
	5. Revenues	18. Financial Instruments 1	
	6. Costs and expenses	19. Financial Instruments 2	
	7. Taxation - Direct and Indirect	20. Review session	
	8. Non-current assets - Intangible assets	21. Cash Flow Statement	PT
	9. Non-current assets - Tangible assets	22. Group accounts/Business comb	
	10. Financial leases	23. Review session	
	11. Impairment of assets	24. Review session	
	12. Review session	25. Final test	PGS
PT	13. Inventories		

LIUC

Trova il futuro che ti cerca.

Session 9 Overview

	Mins
Session overview and objectives	5
Review of pre-work and session 8 recap	10
Research assignment RA 7	25
Tangible Fixed Assets – PP&E	
Definition and initial recognition and measurement	25
Subsequent measurement	25
De-recognition	10
Principal disclosures	5
Investment property	10
Lease accounting	5
Overview of session 10, required reading and assignment for next session	5
Summary and validation	10
	135

Objectives of Session

At the end of this session session students will be able to:

1. **Understand** what constitutes property, plant and equipment under IAS 16; how this is initially measured, and the options for subsequent measurement and de-recognition rules.

2. **Recognize** the difference between expenditure that is of a capital nature and that which is a period expense.

3. ***Understand*** the alternative accounting options for Investment Properties under IAS 40

Overview of Session 9

- Tangible Fixed Assets (IAS 16)
  - Acquired vs constructed
  - Capital vs. revenue expenditures
  - Interest
  - Government Grants
  - Depreciation
  - Revaluations
  - Disclosures
  - Leasing – briefly (IAS 17/IFRS 16)
- Investment properties (IAS 40)

SESSION 8 RECAP AND PRE-WORK SESSION 9

LIUC

Trova il futuro che ti cerca.

Session 8 Summary

- Intangibles definition/examples
- Criteria for recognition and measurement c.f. Apple
- Finite vs. Indefinite and useful life considerations
- Different Types
  - Acquired
  - Goodwill and business combinations
  - Internally generated
  - Government grant, exchanges (Fair Value)
- Industry comparison

Trova il futuro che ti cerca.

Session 9 Pre-work

- Reading
  - Melville International Financial Reporting :
    - Chapter 6 – Intangible assets
  - IASB Statements
    - IAS 38 Intangible assets
    - IFRS 3 Business Combinations
- Exercises
  - Melville
    - On-line multiple choice questions for Chapter 6
    - Melville exercises 6.1 – 6.9
    - EX 8 Intangible assets - Exercises
- Research
  - Research assignment RA 7 Identify the nature of the Property, plant and equipment in your chosen company and how these are classified and accounted for and the accounting policies applied.

RESEARCH ASSIGNMENT RA 7 PROPERTY, PLANT & EQUIPMENT

RA 7 Property, plant and equipment

Company______________

Nature of Property, plant and equipment

Accounting policies for this

N.B. Ignore Leases

Trova il futuro che ti cerca.

INITIAL RECOGNITION AND MEASUREMENT

Property, Plant and Equipment (PP&E) – Definition IAS 16

Property, plant and equipment are ***tangible*** *items that:*

a)Are held for use *in the production or supply of goods and services, for rental to others, or for administrative purposes; and*

b)Are expected to be used during ***more than one period.***

LIUC
Trova il futuro che ti cerca.

Aspects of recognition

An item of PP&E should be recognized i.e. included in the balance sheet as an asset, only if its costs can be measured reliably and its is probable that the future economic benefits associated with it will flow to the entity

Issues	Examples
Components	Aircraft airframe and engines
Spare parts	Inventory or PP&E
Computer software	Operating system, application software, databases
Environmental and safety equipment	Legally required or voluntary
Minimum levels	Oil refinery, gas pipeline
Major inspections	Ships, Oil rigs
Usage	Manufacturer or users e.g. cars

LIUC

Trova il futuro che ti cerca.

Property, plant and equipment – cost elements

1. Purchase price, including any import duties etc.
2. Any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended
   a. Employee benefits
   b. Site preparation
   c. Delivery and handling
   d. Installation/assembly
   e. Testing
   f. Professional fees
3. Estimate of dismantling or site restoration or remediation
4. IAS 23 sets out criteria for capitalizing interest for self-constructed items (qualifying assets)

Excluding:

- Costs of opening a new facility
- Cost of introducing a new product or service (e.g. advertising)
- Costs of doing business in a new location or new customers (e.g. training)
- Administrative and general overheads
- Idle costs
- Initial operating losses
- Relocation costs

Government grants (IAS 20):
Either deduct from cost of asset, or
Defer and credit to income over the asset's life

LIUC

Trova il futuro che ti cerca.

Borrowing costs

IAS23 defines borrowing costs as "*interest and other costs that an entity incurs in connection with the borrowing of funds*".

Borrowing costs that are directly attributable to the acquisition, construction or production of a "**qualifying asset**" must be capitalised as part of the cost of that asset.

Other borrowing costs are recognised as an expense in the period in which they are incurred.

LIUC

Trova il futuro che ti cerca.

Qualifying assets

Qualifying assets are those which take a **substantial period of time** to get ready for use or sale.

The capitalisation of borrowing costs should begin when:

(a) expenditure is being incurred on the asset;

(b) borrowing costs are being incurred, and

(c) activities are in progress that are necessary so as to prepare the asset for its intended use or sale.

Capitalisation ends when substantially all of the activities necessary to prepare the asset for its intended use or sale are complete.

LIUC

Trova il futuro che ti cerca.

Government grants (IAS20)

- Government grants should be recognised in profit or loss "*over the periods in which the entity recognises as expenses the related costs which the grants are intended to compensate*".
- Therefore a grant for the acquisition of an asset should be recognised when calculating profit or loss for the periods in which depreciation is charged on that asset.
  - The grant may be *credited to a deferred income account* and then systematically transferred to the statement of comprehensive income over the useful life of the asset, **or**
  - The grant may be *deducted from the carrying amount* of the asset. This will result in reduced depreciation charges over the asset's useful life.

Trova il futuro che ti cerca.

SUBSEQUENT MEASUREMENT

PP&E - Subsequent measurement options

Cost model

- Cost less accumulated depreciation and less any accumulated impairment losses (if any)

Revaluation model

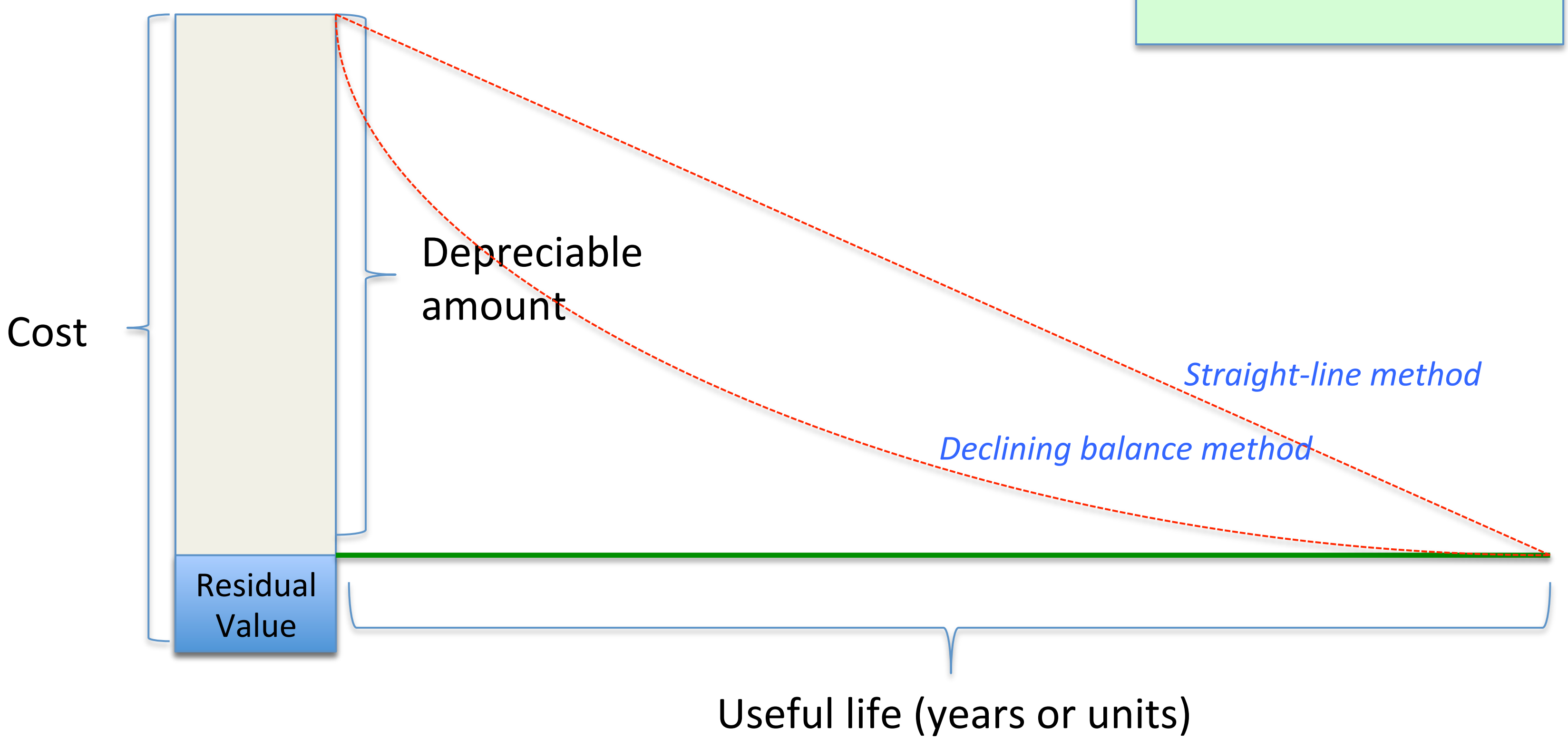
- Initially recognized at cost and subsequently measured at Fair Value less subsequent accumulated depreciation and impairment losses (if any). (Fair value usually means market value).

The choice made must be applied to an entire class of PP&E, but all classes are not required to have the same policy.

Cost model

Estimates required for:

- Residual value
- Useful life
- Depreciation rate



Depreciation

IAS16 defines depreciation as "*the systematic allocation of the depreciable amount of an asset over its useful life*".

Depreciable amount is "*the cost of an asset, or other amount substituted for cost, less its residual value*".

Residual value is "*the estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal...*".

Useful life is "*the period over which an asset is expected to be available for use by an entity ...*".

Purpose of depreciation

The *sole purpose* of charging depreciation is to *allocate an expense between accounting periods*. In particular:

- The depreciation process makes no attempt to show assets at their current values.

- Charging depreciation does not guarantee that there will be funds available to replace assets when they come to the end of their useful lives.

Review of residual values and useful lives

The residual value and useful life of property, plant and equipment should be reviewed at least at the end of each financial year.

If expectations differ from previous estimates, these should be accounted for as a change in an accounting estimate in accordance with IAS 8.

The asset's depreciable amount is revised to reflect any change in residual value and then this amount is allocated as depreciation over the remainder of the asset's expected useful life.

LIUC
Trova il futuro che ti cerca.

Depreciation methods

The depreciation method chosen in relation to an item of property, plant and equipment should match the usage pattern of that item.

Alternative depreciation methods include:

- the straight-line method;
- the diminishing balance method;
- the units of production method.

Review of depreciation methods

The depreciation method applied to an item of property, plant and equipment should be reviewed at least at the end of each financial year. If the usage pattern of the asset has changed, the depreciation method should be changed accordingly.

A change in depreciation method is accounted for as a change in an accounting estimate in accordance with the requirements of IAS 8.

LIUC

Trova il futuro che ti cerca.

Useful Life Considerations

Asset category	Estimated Useful life
Land	Usually unlimited
Buildings	20 + years
Machinery	8 - 10 years
Furniture and Fixtures	10 - 12 years
Motor vehicles	4 - 5 years
Computers and software	3 -5 years

What factors might increase or decrease an asset's useful life?

LIUC

Trova il futuro che ti cerca.

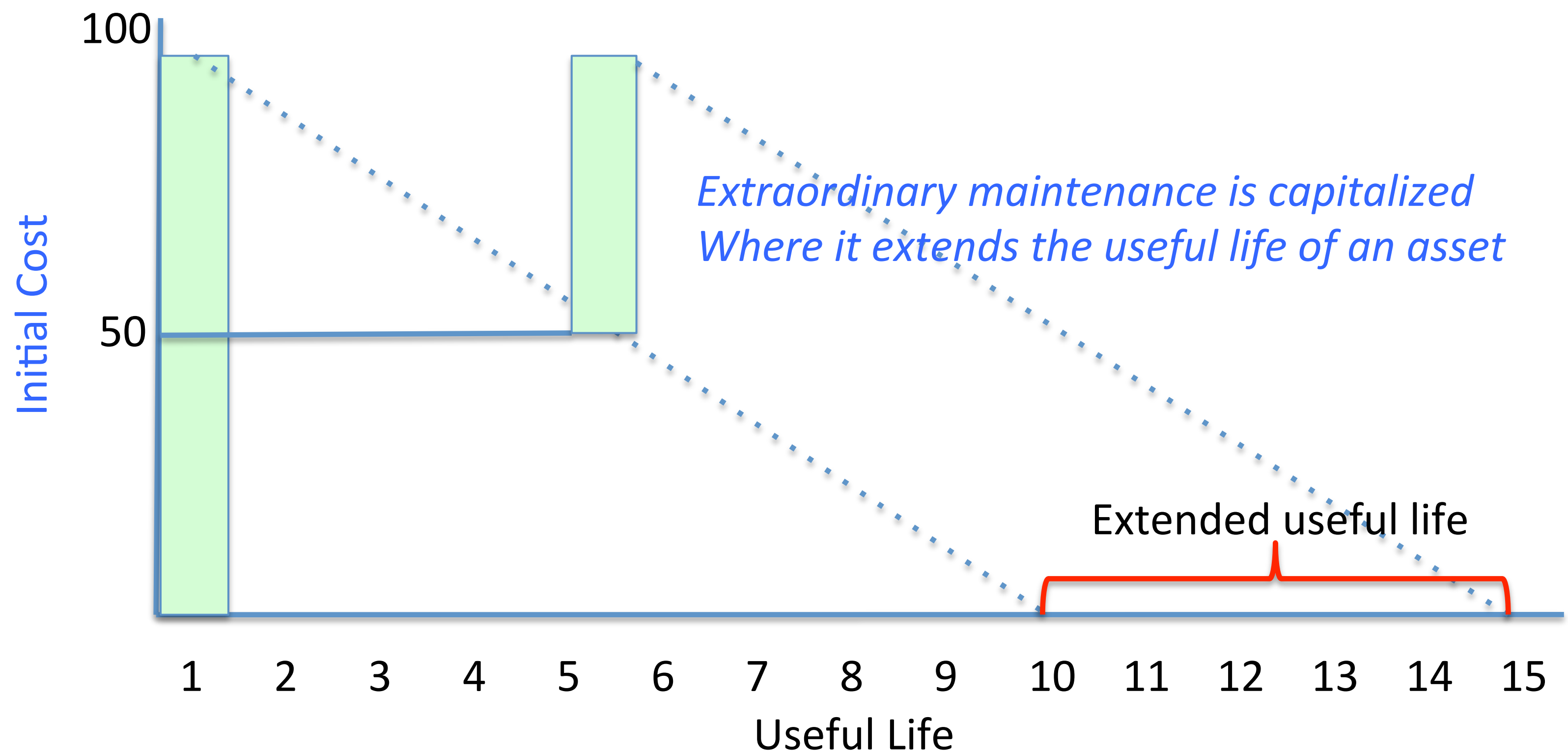
Subsequent expenses

- Routine, service, repair and maintenance costs incurred after initial recognition of an item of PPE as an asset are not capital expenditure and are accounted for as an expense in the period to which they relate.

- The cost of major replacements should be treated as capital expenditure and recognised as an addition to the carrying amount of the asset concerned.

Repairs and Maintenance

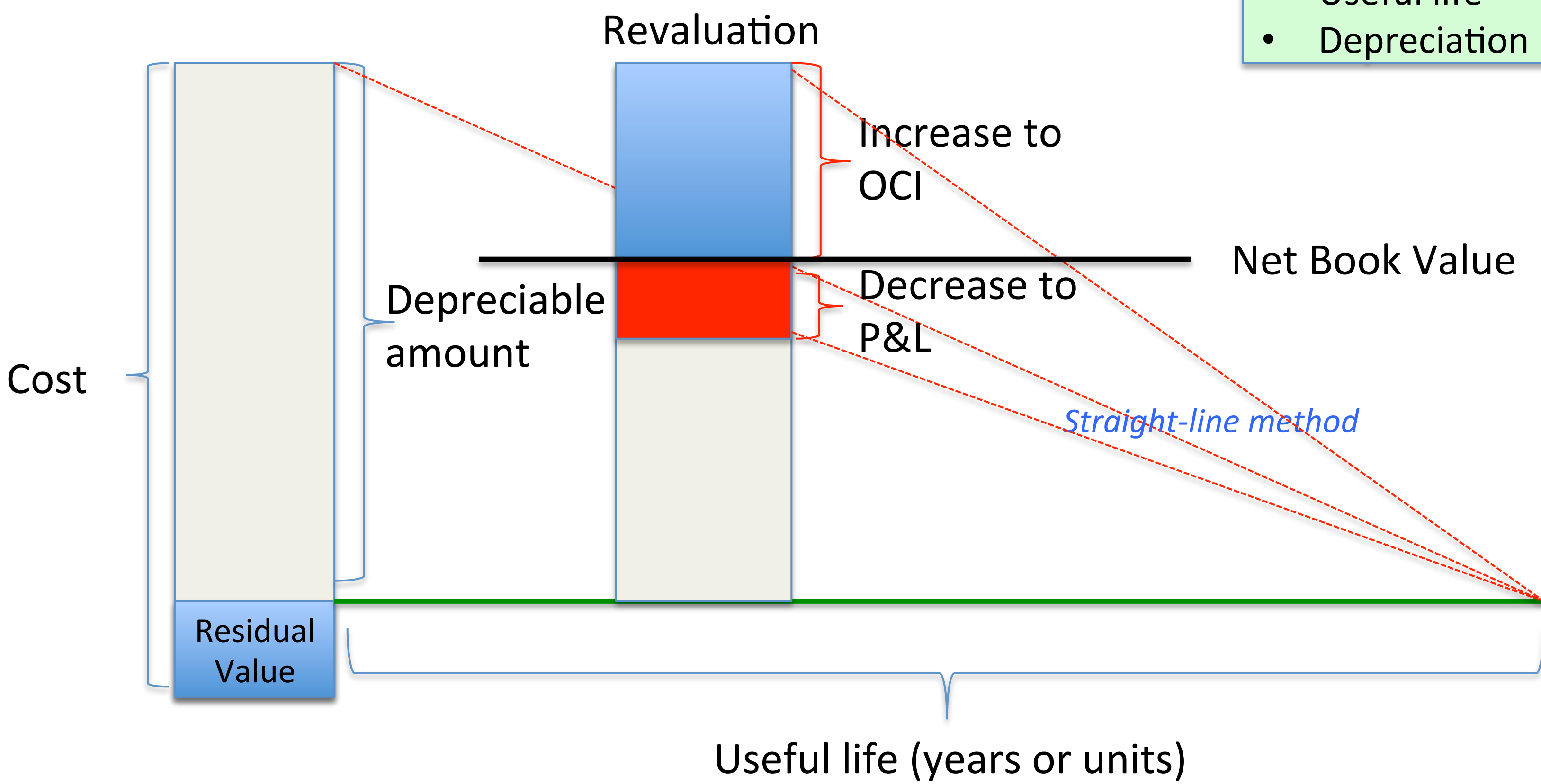
Ordinary maintenance is expensed



Revaluation model

Estimates still required for:

- Residual value
- Useful life
- Depreciation rate



Revaluation gains and losses

In general, revaluation gains and losses are accounted for as follows:

- revaluation gains are credited to a revaluation reserve and recognised as other comprehensive income (OCI)
- revaluation losses are recognised as an expense in the calculation of profit or loss (P&L)

The situation is more complex if an item is revalued upwards after a previous downwards revaluation (or vice versa).

Revaluation gains and losses

Note that:

• A revaluation must be recognised as income when calculating the entity's profit or loss to the extent that it reverses any revaluation decrease in respect of the same item that was previously recognised as an expense

• A revaluation decrease must be debited to revaluation reserve and shown (as a negative figure) in other comprehensive income to the extent of any credit balance previously existing in the revaluation reserve in respect of the same item

DERECOGNITION

LIUC
Trova il futuro che ti cerca.

Derecognition

De-recognition is the removal of the carrying amount of an item from the financial statements, and occurs when an item is disposed of, or when no further economic benefits are expected to flow from its use or disposal.

	Sale	**Other type of Disposal**
Sale proceeds	1,000	0
Carrying amount	<u>500</u>	<u>500</u>
Profit (loss)	500	(500)

What is the double entry for this?

The profit or loss on disposal should not be classified as revenue. Any related revaluation surplus is transferred from revaluation reserve to retained earnings

Revaluation reserve – Derecognition

- The revaluation reserve included in shareholders' equity in respect of an item of property, plant and equipment may be transferred directly to retained earnings when the asset is derecognised. This may involve transferring the whole of the reserve when the asset is retired or disposed of. However, some of the reserve may be transferred as the asset is used by an entity. In such a case, the amount of the surplus transferred would be the difference between depreciation based on the revalued carrying amount of the asset and depreciation based on the asset's original cost.

- Transfers from revaluation reserve to retained earnings are not made through profit or loss.

Main disclosure requirements of IAS16

For each class of property, plant and equipment:

- the measurement bases used;
- the depreciation methods used;
- the gross carrying amount and accumulated depreciation at the beginning and end of the accounting period;
- a reconciliation of the carrying amount at the beginning and end of the period, showing additions, disposals, revaluation increases and decreases, depreciation, impairment losses and any other movements.

Trova il futuro che ti cerca.

INVESTMENT PROPERTY IAS 40

LIUC

Trova il futuro che ti cerca.

Investment property (IAS40)

Investment property is property (land and buildings) which is "***held ... to earn rentals or for capital appreciation or both***, *rather than:*

(a) for use in the production or supply of goods or services;

(b) for administrative purposes, or

(c) for sale in the ordinary course of business".

Measurement of investment property

Initial measurement is at cost. Subsequently, investment property may be measured using either:

- **The fair value model**; the property is carried at fair value; gains and losses on adjusting fair value are recognised in the calculation of profit or loss.
- **The cost model**; the property is carried at cost less any accumulated depreciation and less any accumulated impairment losses.

Trova il futuro che ti cerca.

LEASE ACCOUNTING

LIUC

Trova il futuro che ti cerca.

Lease Accounting – IAS 17

N.B. IFRS 16 Replaces this from 1 January 2019

	Balance sheet		P&L Account
Finance Lease	Asset		Depreciation
		Liability	Interest expense
Operating lease			Rental expense

*A **finance lease** is a lease that transfers substantially all the risks and rewards incidental to ownership of an asset. An operating lease is a lease other than a finance lease.*

Trova il futuro che ti cerca.

REQUIRED READING AND ASSIGNMENT FOR NEXT SESSION

Overview of Session 10

- Leasing (IAS 17)
  - Finance or operating
  - Lessee vs. lessor accounting
  - Lease terminations
  - Sale and leaseback transactions
- Leasing (IFRS 16)
  - Recognition and measurement
  - Lessee vs lessor accounting
  - Sale and leaseback transactions

LIUC

Trova il futuro che ti cerca.

Session 10 Pre-work

- Reading
  - Melville International Financial Reporting
    - Chapter 5 – Property, plant and equipment
  - IASB Statements
    - IAS 16 Property, plant and equipment
    - IAS 40 Investment Property
- Exercises
  - Melville On-line multiple choice questions for Chapter 5
  - Melville Exercises 5.1 – 5.8
  - EX 9 Property, plant and equipment - Exercises

- Research assignment
  - RA 8 Identify how leases are accounted for in your chosen company.

LIUC
Trova il futuro che ti cerca.
Trova il futuro che ti cerca.

Research Assignement 8 - Leases

Company_____________

	As Lessor	As Lessee
Finance leases		
Operating Leases		
Accounting policies		
Disclosures		
Impact of IFRS 16		

SUMMARY AND VALIDATION

LIUC

Trova il futuro che ti cerca.

Overview of Session 9

- Tangible Fixed Assets
  - Acquired vs constructed
  - Capital vs. revenue expenditures
  - Interest
  - Government Grants
  - Depreciation
  - Revaluations
  - De-recognition
  - Leasing – briefly
- Investment properties

LIUC

Trova il futuro che ti cerca.

Session 9 Validation

- Property, plant & equipment
  - How is this originally measured?
  - What are the subsequent measurement options?
  - What estimates are needed?
  - What is the significance of a component?
  - When should interest be capitalized?
  - How are revaluation gains and losses accounted for?
  - How should government grants be accounted for?
- Investment property
  - What options are available to companies and what are the accounting implications of these?