15.515 MIDTERM REVIEW

- ¶ Review of Key Concepts
 - Revenue Recognition
 - Accounts Receivable
 - Inventory (LIFO vs. FIFO)
 - PP&E
 - Statement of Cash Flows
- ¶ Problems
 - E4-5
 - P6-4
 - P7-9
 - P9-8
 - P14-14
- ¶ Checklist
- ¶ Famous Last Words for Midterm
- ¶ Questions

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REVENUE RECOGNITION

Revenue is recognized when the firm has:

- ¶ Performed all, or a substantial portion of, the services to be provided
- ¶ Incurred a substantial majority of the costs, and the remaining costs can be estimated
- ¶ Received either cash, a receivable, or some other asset for which
 - A reasonable precise value can be measured
 - Collectibility can be assured

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E4-5

See Problem E4-5 in the course textbook.

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ACCOUNTS RECEIVABLE

- ¶ Two methods for determining Allowance for Bad Debts
 - Percentage of (Credit) Sales
 - Fixes the Bad Debt Expense recorded for the year
 - Aging Method
 - Fixes the *Ending Balance* of Allowance for Bad Debts
 - Bad Debt Expense is as a "Plug-in"
- ¶ Relevant Formulae vs. "tables" (Don't use them blindly!!)
 - $A/R_{EB} = A/R_{BB} + Credit Sales Cash Received Write-off + Recovery$
 - ADA_{EB} = ADA_{BB} + Bad Debt Expense Write-off + Recovery
- ¶ Write-offs and Recovery of bad debt only affects the Balance Sheet (not the Income Statement). They affect the Gross A/R and ADA but not the Net A/R.
- ¶ Watch the sign convention for ADA!

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P6-4

See Problem P6-4 in the course textbook.

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INVENTORY (LIFO VS. FIFO)

- ¶ LIFO and FIFO produce *temporary differences* in accounting numbers
- ¶ No approach is superior
- ¶ Firms using LIFO will give information to make numbers comparable across firms¹
- ¶ Relevant formulae
 - LIFO Reserve = cumulative difference in FIFO LIFO inventory **or**
 - LIFO Reserve = Ending Inv_{FIFO} Ending Inv_{LIFO}
 - *Change* in LIFO Reserve = COGS_{LIFO} COGS_{FIFO}
 - $INV_{EB} = INV_{BB} + P^2 COGS$
- ¶ Make sure you know when to use the *absolute* amount in the LIFO Reserve and when to use *changes* in the LIFO Reserve

¹ LIFO Reserve

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² Purchases/Production

P7-9

See Problem P7-9 in the course textbook.

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PP&E

- ¶ Key formulae vs. "table"
 - $PPE_{EB} = PPE_{BB} + Acquisitions Disposals$
 - $AccDep_{EB} = AccDep_{BB} + Depreciation AccDep_{Disposal}$
 - MV / Proceeds from sales = BV + gain/loss
- ¶ Three key ways to depreciate a fixed asset:
 - 1) Straight-line Depreciation Method
 - 2) Production (Depletion) Method
 - 3) Accelerated Depreciation
- ¶ Four simple steps to depreciation:
 - 1) Assess total cost to be allocated over time
 - 2) Estimate the salvage value (all methods except for double-declining balance)
 - 3) Estimate useful life
 - 4) Choose depreciation method
- ¶ Watch the sign convention for Accumulated Depreciation!

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P9-8

See Problem P9-8 in the course textbook.

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STATEMENT OF CASH FLOWS

Two major approaches to Statement of Cash Flows: Direct and Indirect

- ¶ The major difference between these two methods is in how *Cash Flows from Operating Activities are presented;* most companies use the Indirect approach.
 - Direct Approach:
 - Analyze *operating* cash transactions and classify them as either cash sales or cash expenses (i.e., look down the "Cash" column of the BSE)
 - Indirect Approach:
 - Start with **net income** derived from accrual-based accounting
 - Decrease **net income** for *operating* income(s) that did not generate cash (i.e. A/R)
 - Increase the net income for *operating* expenses that did not use up cash (e.g., depreciation and amortization)
 - Adjust the net income for *operating* cash items that were not expensed
- ¶ The *investing* and *financing* sections are the same for both Direct SCF and Indirect SCF

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P14-14 (PARTS A+B ONLY)

See Problem P14-14, parts A and B, in the course textbook.

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P14-14 (CONTD.)

	<u>Assets</u>							<u>Liabilities</u>			Equity			
#	Cash	Inv	A/R	P-Rent ³	PP&E	-AccDep	=	A/P	Int Pay	Div Pay	N/P	CS	RE	Notes
1							=							
2							=							
3							=							
4							=							
5							=							
							=							
6							=							
7							=							
8							=							
9							=							
10							=							
11							=							
12							=							
EB							=							

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³ Prepaid Rent

Income Statement Statement of Cash Flows

Statement of Retained Earnings

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FAMOUS LAST WORDS BEFORE THE MIDTERM

- ¶ Put some effort into your cheat sheet... you learn a lot through the preparation
 - Examples are useful
- ¶ Review
 - Homework/problem sets
 - Midterms from previous years
 - Lecture notes
 - Recitation notes
 - Chapter summaries
 - Optional problems (time permitting)
- ¶ Get some sleep the night before the midterm
- ¶ And, most important of all (... the one piece of advice I always hated...)

RELAX!!!! ©

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