

### Undergraduate Distance Education Review Form

(Required for all courses taught by distance education for more than one-third of teaching contact hours)

#### Existing and Special Topics Course

Course: FIN 310 Fundamentals of Finance

Instructor of Record: Dr. Alan Eastman phone: (724) 357-5738 e-mail: aeastman@iup.edu

#### Step One: Department or its Curriculum Committee

The committee has reviewed the proposal to offer the above course using distance education technology, and responds to the CBA criteria as follows:

- 1. Will an instructor who is qualified in the distance education delivery method as well as the discipline teach the course? X Yes     No
- 2. Will the technology serve as a suitable substitute for the traditional classroom? X Yes     No
- 3. Are there suitable opportunities for interaction between the instructor and student? X Yes     No
- 4. a. Will there be suitable methods used to evaluate student achievement? X Yes     No
- b. Have reasonable efforts been made to insure the integrity of evaluation methods (academic honesty) X Yes     No

#### 5. Recommendation:

Positive (The objectives of the course can be met via distance education.)

Negative

Israel Afford 03/29/05  
signature of department designee date

If positive recommendation, immediately forward copies of this form and attached materials to the Provost and the Liberal Studies Office for consideration by the University-Wide Undergraduate Curriculum Committee. Dual-level courses also require review by Graduate Committee for graduate-level offering. Send information copies to 1) the college curriculum committee, 2) dean of the college, and 3) Dean of the School of Continuing Education.

#### Step Two: UNIVERSITY-WIDE UNDERGRADUATE CURRICULUM COMMITTEE

Positive recommendation

Negative recommendation

Gail S. Sechrist 4/12/05  
signature of committee chair date

Forward this form to the Provost within 24 calendar days after review by committee.

#### Step Three: Provost

Approved as distance education course

Rejected as distance education course

[Signature] 4/14/05  
signature of Provost date

#### Step Four:

MAR 30 2005

Forward materials to Dean of the School of Continuing Education.

Rationale for responses 1 – 4 on Undergraduate Distance Education Review Form

1. Dr. Eastman has taught multiple sections of FIN 310 for the past 8 years. Dr. Eastman currently uses online materials to supplement his in-class sections of FIN 310, including Finance Works software from the publisher of the proposed textbook for the online course, and has attended WebCT instruction sessions at the Instructional Design Center.
2. Fundamentals of Finance is a course that requires a significant time commitment from the students, who must work a sufficient number of problems to develop their problem-solving and analytical skills within the framework of financial management theory. The technology of WebCT and Finance Works provides an almost limitless supply of questions and problems in a format that allows students to seek immediate help through solution hints, relevant examples, links to textbook pages, and the option to continue with similar questions until the student feels confident in his or her ability on that topic.
3. WebCT provides communications tools that include Discussion Pages, Mail, and Chat Rooms. Students may interact with each other and with the professor on a daily basis to discuss course material, to assist one another in the completion and understanding of assignments, and to discuss relevant current events.
4. Student performance will be evaluated based upon homework, quizzes, and exams, just as in a traditional classroom setting. Students must register with a unique user name and password, and their activity online may be monitored to determine how long each student participates in the completion of homework, quizzes, and exams. Exams are timed and given to all students at the same time to help prevent cheating.

To Whom It May Concern:

I've included the following items for your review of my proposal for teaching FIN 310, Fundamentals of Finance, as a distance education course.

- FIN 310 Syllabus of Record
- My Proposed FIN 310 Syllabus
- WebCT Homepage
- WebCT Chapter Modules Page (showing links to student resources available on the publisher's website and to Finance Works, the software used for completing homework, quizzes, and exams)
- Chapter 3 Module
  - Course Objectives and Chapter Learning Goals
  - Assignments
  - Sample homework exercise using Finance Works (Note: a product demo is available at <http://www.aw-bc.com/financeworks/features.html>)
  - Printout of all homework problems assigned for chapter 3
  - Self-assessment quiz from the book's website
  - Chapter 3 quiz available at Finance Works website
  - Web Exercise

Assignments for other chapters will be similar to the above. Web exercises and E-theme articles will be used to foster class discussion on WebCT discussion boards. For example, the chapter 3 web exercise deals with the appropriateness of corporate taxation and students will be asked to comment on the elimination of corporate taxes altogether, or on proposals to tax only the largest corporations, after finding relevant information at the IRS website. Communication will also be possible in WebCT via email and chat rooms.

Thank you for your consideration of my proposal. Please let me know if you need any additional information.

Sincerely,



Dr. Alan Eastman  
Department of Finance and Legal Studies  
(724) 357-5738  
[aeastman@iup.edu](mailto:aeastman@iup.edu)

SYLLABUS OF RECORD  
FI310 Fundamentals of Finance

I. Catalog Description

FI310 Fundamentals of Finance	3 credits
	3 lecture hours
	0 lab hours
	3c-01-3sh

Prerequisites: AG202, MA214 for business majors; AG202, MA214 or MA217 for non-business majors (MA214 recommended)

Study of valuation models, financial statement analysis and forecasting, capital budgeting methods, and working capital management. Also includes an introduction to risk and return, capital markets and institutions, and security valuation.

II. COURSE OBJECTIVES

1. Student will be able to analyze and forecast financial statements, and understand their uses in making financial decisions.
2. Student will be able to apply valuation concepts to a wide range of assets, including securities, loans, and productive assets.
3. Student will be able to identify the characteristics of various securities and understand how their markets function.
4. Student will understand the roles of financial institutions, monetary policy, and interest rates in well-functioning markets.
5. Student will become familiar with the techniques of managing long-term and short-term assets and liabilities.
6. Students will be able to use data from on-line sites such as EDGAR, the SEC financial reporting database, and other sources of financial information to aid in financial decision-making.

### III. COURSE OUTLINE

- A. Overview of Financial Management (5%)
  - Increasing Importance of Financial Management
  - Role of Financial Manager within the Firm
  - Goals of the Firm - Stockholder versus Stakeholder and Ethical Considerations
- B. Financial Statements and Cash Flow (20%)
  - Review of Income Statement and Balance Sheet
  - Income versus Cash Flow
  - Statement of Cash Flow
  - Financial Statement Analysis
  - Forecasting of Financial Statements
- C. Financial Markets, Institutions and Interest Rates (10%)
  - Characteristics of Markets and Institutions
  - Determinants of Interest Rates
  - Term Structure of Interest Rates
  - Impact of Interest Rate Levels on Security Prices
- D. Time Value of Money and the Impact on Financial Decisions (15%)
  - Present Value Versus Future Value
  - Values of Annuities and Perpetuities
- E. Bond Valuation (5%)
  - Bond Characteristics
  - Valuation Models
  - Yield to Maturity and Yield to Call
  - Interest Rate Risk
- F. Stock Valuation (5%)
  - Types of Stocks and Their Characteristics
  - Valuation Models
- G. Overview of Risk and Return (5%)
  - Measurement of Risk and Return
  - Diversification
  - Capital Asset Pricing Model (CAPM) and Beta
- H. Cost of Capital (5%)
  - Cost of Debt
  - Cost of Preferred Stock
  - Cost of Retained Earnings
  - Weighted Average Cost of Capital
- I. Capital Budgeting (15%)
  - Net Present Value
  - Internal Rate of Return
  - Payback and Discounted Payback
  - Conflicts Between NPV and IRR
  - Estimating Cash Flows
  - Expansion and Replacement Projects

- J. Managing and Financing Current Assets (15%)
- Cash Management
  - Accounts Receivable and Inventory Management
  - Financing Working Capital- Bank Loans and Accounts Payable

#### IV. EVALUATION METHODS

The course grade will be the weighted average of grades earned on the following assignments:

First Exam	20%
Second Exam	20
Third Exam	20
Comprehensive Final Exam	20
Project	10
Homework, Quizzes, and Class Exercises	10
	<u>100%</u>

Grading Scale:	90 - 100	A
	80 - 89	B
	70 - 79	C
	60 - 69	D
	below 60	F

#### V. REQUIRED TEXTBOOKS, SUPPLEMENTAL BOOKS AND READINGS

Brigham, Eugene F., and Joel F. Houston. Fundamentals of Financial Management, 8th ed. Dryden Press, 1998.

#### VI. BIBLIOGRAPHY

Brealey, Richard A., Stewart C. Myers, and Alan J. Marcus. Fundamentals of Corporate Finance, 2nd ed. Irwin McGraw-Hill, 1999.

Cooley, Philip L. and Jean L. Heck. "Establishing Benchmarks for Teaching the Undergraduate Introductory Course in Financial Management," Journal of Financial Education 22 (Fall 1996).

Gitman, Lawrence J. Principles of Managerial Finance, 8th ed. Addison- Wesley, 1997.

Smith, Stanley D. "Using EDGAR on the Internet to Teach Finance and Business Courses," Journal of Financial Education 22 (Fall 1996).

**INDIANA UNIVERSITY OF PENNSYLVANIA  
EBERLY COLLEGE OF BUSINESS AND INFORMATION TECHNOLOGY  
DEPARTMENT OF FINANCE AND LEGAL STUDIES**

**FIN 310:** Fundamentals of Finance  
**Professor:** Dr. Alan D. Eastman  
**Office:** 322F Eberly College of Business and Information Technology  
**Phone:** (724) 357-5738  
**Email:** aeastman@iup.edu  
**Office Hours:** Monday, Wednesday, and Friday 11:30 am – 12:30 pm  
Monday, Wednesday 2:00 pm to 3:00 pm  
Other Times By Appointment  
**Term:** Spring 2005

**CATALOG COURSE DESCRIPTION**

**FIN 310 – Fundamentals of Finance**

**Credits: 3.00**

The study of valuation models, financial statement analysis and forecasting, capital budgeting methods, and working capital management. Also includes an introduction to risk and return, capital markets and institutions, and security valuation.

**COURSE OBJECTIVES**

1. The student will be able to analyze and forecast financial statements, and understand their uses in making financial decisions.
2. The student will be able to apply valuation concepts to a wide range of assets, including securities, loans, and productive assets.
3. The student will be able to identify the characteristics of various securities and understand how their markets function.
4. The student will understand the roles of financial institutions, monetary policy, and interest rates in well-functioning markets.
5. The student will become familiar with the techniques of managing long-term and short-term assets and liabilities.
6. Students will be able to use data from on-line sites and other sources of financial information to aid in financial decision-making.

**COURSE OVERVIEW**

The COURSE OUTLINE/SYLLABUS contains information about the course, including required text, assignments, exam schedule, etc. Assignments are listed here and should be cross-referenced with the CALENDAR for assignment deadlines. The COURSE CALENDAR and the COURSE OUTLINE can be printed for easy referral throughout the semester. Since this is a distance-learning course, each student is responsible for completing the assignments as indicated in the schedule. Therefore, be sure to consult the COURSE CALENDAR AND OUTLINE on a regular basis. Please use WebCT for all correspondence.

**PREREQUISITES:** AG202, MA214 for business majors; AG202, MA214 or MA217 for non-business majors (MA214 recommended)

**There will be absolute enforcement of every prerequisite requirement for the coursework offered by the Eberly College of Business and Information Technology. This means that students cannot postpone prerequisites and take them after the course in question.**

**The Dean's office is responsible for monitoring course prerequisites. Students who manage to register for coursework in spite of the fact that they do not have the appropriate prerequisite will be subject to unilateral withdrawal after the course has commenced. At that time, no appeal will be accepted and adding a different class after the official registration period will not be approved.**

**REQUIRED TEXT:** Gitman, Lawrence. Principles of Managerial Finance, 11<sup>th</sup> Edition, Addison Wesley, 2006.

**RECOMMENDED READING:** *The Wall Street Journal* and other Finance Periodicals such as *Business Week*.

**GRADING:** The final course grade will be determined by three semester exams weighted at 45% (Exam One at 10%, Exam Two at 20%, and Exam Three at 15%), quizzes weighted at 15%, homework and web-based exercises weighted at 15%, and a comprehensive final exam weighted at 25%. An average of 90% or above will earn an A, an average of 80% to 89% will earn a B, an average of 70% to 79% will earn a C, an average of 60% to 69% will earn a D, and an average below 60% will earn an F.

**EXAMS:** All exams will be taken online and will consist of multiple choice questions and problems. Short essay questions may be included depending on the nature of the material. Students may use their book and notes for exams. However, exams will be timed, so advance preparation is critical for success. **Make-up exams will not be given.** If an exam is missed due to an excused absence, such as a **documented** illness or emergency, the weight of the missed exam will be added to the weight of the final exam. **Except in cases of dire emergency, no consideration will be given to any student who misses an examination without first receiving the permission of the instructor.**

**QUIZZES:** Quizzes will be taken online. All quizzes will consist of multiple choice questions and problems. Students may use their book and notes for quizzes. However, quizzes will be timed, so advance preparation is critical for success. Each quiz may be taken up to three times, with the highest score being recorded as the grade. Quizzes will be assigned for each chapter. Once the window for taking a quiz is closed, the quiz will be available for review. Students will be able to see the correct answers as well as the answers they selected. Quizzes will be administered through Finance Works, the publisher's online testing, homework, and tutorial system. There will be no make-ups. Instead, the lowest two scores will be dropped.

**HOMEWORK:** Homework will be solved and submitted online. Students are encouraged to assist one another and to correspond with Dr. Eastman on a regular basis when working the homework problems. Homework assignments will assist in preparation for the quizzes and exams, so it is very important for students to complete these assignments and to ask questions if they are having difficulty. Finance Works provides many opportunities to work additional problems, and will actually generate additional problems in areas the student may be struggling.



**ARTICLE REVIEWS:** In order to encourage outside reading, extra credit points may be obtained during the semester by submitting article reviews relating to course topics. Only one article review will be accepted per week. Article reviews must be submitted online by Sunday night at midnight for the previous week. Each article must be current. If the article is from a magazine or journal, it must be from the most recent issue. If the article is from a newspaper, such as the Wall Street Journal, it must be from the current or previous week. If the article is obtained online, it must relate to an event occurring during the current or the previous week. A proper citation for the article must be submitted, along with a brief summary. The summary should describe the article and also relate the topic or issue to one covered in the course. Be as specific as possible in linking the article to class material. Each review will be assigned a score of zero, one, or two extra credit points. A maximum of 10 extra credit points may be earned during the semester. These points will be added onto the final exam score. Grammar and spelling will be considered when assigning a score. One point will be deducted for each error after the first error. In other words, a review with no errors or with one error can receive a maximum score of two points; a review with two errors can receive a maximum score of one point; and all other reviews will receive zero points.

**PARTICIPATION:** No formal classroom meetings are scheduled or required. Students are encouraged to correspond with one another and with Dr. Eastman via WebCT Communications Tools, which consist of Discussion Pages, Chat Rooms, and Mail. Students who participate in online correspondence will learn more, enjoy the class more, and perform better on quizzes and examinations than students who "go it alone."

**ASSIGNMENTS:** Assignments are noted for each section of the course leading up to an exam. Students need to work regularly to complete assignments in a timely manner. Quizzes and exams must be completed online during defined windows of opportunity. Please make sure that you are available during the scheduled times.

**Online Exam Schedule:**

- Exam One, chapters 1, 2, and 3 on 7/15/05, 7 pm to 9 pm
- Exam Two, chapters 4, 5, 6, and 7 on 7/26/05, 7 pm to 9 pm
- Exam Three, chapters 8, 9, and 11 on 8/3/05, 7 pm to 9 pm
- Final Exam, chapters 1 – 9, 11, 14 and 15 on 8/11/05, 7 pm to 9 pm

**Reminders:**

- Please review carefully the course outline/syllabus/schedule.
- Additional readings, problems, and cases may be assigned.
- Quizzes may be taken up to three times, with the highest score recorded for grading purposes. Practice or lecture quizzes are not included in the grading process.
- All exams are open book and open notes.
- Solutions to problems for submission are due no later than midnight of the date of the assignment.
- If you have any questions, please email Dr. Eastman through WebCT.

## **Schedule:**

### July 11

- Review course outline
- Review text
- Review WebCT
- E-mail student biography (one paragraph) to Dr. Eastman along with any concerns/questions about the course
- Reading assignment – Chapter 1
- Homework – Chapter 1: all problems on Finance Works (4 total)
- Quiz – Chapter 1 (to be completed by midnight 7/12/05)

### July 12

- Reading assignment – Chapter 2
- Homework – Chapter 2: all assigned problems on Finance Works (10 total)
- Quiz – Chapter 2 (to be completed by midnight 7/13/05)

### July 13

- Reading assignment – Chapter 3
- Homework – Chapter 3: all assigned problems on Finance Works (6 total)
- Quiz – Chapter 3 (to be completed by midnight 7/14/05)
- Last day of drop/add period

### July 14

- Homework – Chapter 3: all assigned problems on Finance Works (3 total)
- Review for exam, practice test available
- Reminder, complete chapter 3 quiz by midnight

### July 15

- Exam One (online) covering chapters 1 – 3, 7:00 pm to 9:00 pm.

### July 18

- Reading assignment – Chapter 4
- Homework – Chapter 4: all assigned problems on Finance Works (15 total)

### July 19

- Reading assignment – Chapter 4
- Homework – Chapter 4: all assigned problems on Finance Works (8 total)
- Homework – Chapter 4: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 4 (to be completed by midnight 7/19/05)

### July 20

- Reading assignment – Chapter 5
- Homework – Chapter 5: all assigned problems on Finance Works (8 total)
- Homework – Chapter 5: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 5 (to be completed by midnight 7/21/05)

July 21

- Reading assignment – Chapter 6
- Homework – Chapter 6: all assigned problems on Finance Works (8 total)
- Homework – Chapter 6: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 6 (to be completed by midnight 7/22/05)

July 22

- Reading assignment – Chapter 7
- Homework – Chapter 7: all assigned problems on Finance Works (8 total)
- Homework – Chapter 7: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 7 (to be completed by midnight 7/25/05)

July 25

- Homework – Chapters 4 – 7 review: all assigned problems on Finance Works (10 total)
- Review for exam two, practice test available
- Reminder, complete chapter 7 quiz by midnight

July 26

- Exam Two (online) covering chapters 4 – 7, 7:00 pm to 9:00 pm

July 27

- Reading assignment – Chapter 8
- Homework – Chapter 8: all assigned problems on Finance Works (7 total)
- Homework – Chapter 8: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 8 (to be completed by midnight 7/28/05)

July 28

- Reading assignment – Chapter 8 (continued)
- Homework – Chapter 8: all assigned problems on Finance Works (7 total)
- Reminder: complete chapter 8 quiz by midnight

July 29

- Reading assignment – Chapter 9
- Homework – Chapter 9: all assigned problems on Finance Works (8 total)
- Homework – Chapter 9: spreadsheet exercise due on 8/10/05
- Quiz – Chapter 9 (to be completed by midnight 8/01/05)

August 1

- Reading assignment – Chapter 11
- Homework – Chapter 11: all assigned problems on Finance Works (8 total)
- Quiz – Chapter 11 (to be completed by midnight 8/2/05)

#### August 2

- Homework – Chapters 8, 9 and 11 review: all assigned problems on Finance Works (5 total)
- Review for exam two, practice test available
- Reminder, complete chapter 11 quiz by midnight

#### August 3

- Exam Three (online) covering chapters 8, 9, and 11, 7:00 pm to 9:00 pm

#### August 4

- Reading assignment – Chapter 14
- Homework – Chapter 14: all assigned problems on Finance Works (5 total)
- Quiz – Chapter 14 (to be completed by midnight 8/5/05)

#### August 5

- Reading assignment – Chapter 15
- Homework – Chapter 15: all assigned problems on Finance Works (5 total)
- Quiz – Chapter 15 (to be completed by midnight 8/8/05)

#### August 8 – 10

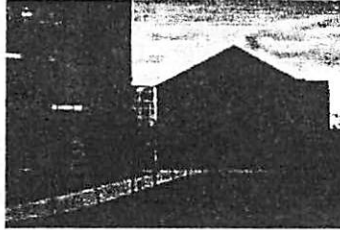
- Reminder, chapter 15 quiz to be completed by midnight on August 8<sup>th</sup>
- Complete 4 Web Exercises, choosing from chapters 2, 3, 4, 5, 7, 8, 11, 14 (to be completed by midnight 8/10/05)
- Reminder, spreadsheet exercises are due by midnight on 8/10/05
- Review for final exam
- Practice tests available

#### August 11

- Comprehensive Final Exam (online) covering chapters 1-9, 11, 13, and 14, 7:00 pm to 9:00 pm

## Welcome to FIN 310: Fundamentals of Finance

An Online Distance Education Course Offered By The...



Eberly College of Business and Information Technology

Indiana University of Pennsylvania

And Taught By...



Dr. Alan D. Eastman

322F Eberly College of Business and Information Technology

(724) 357-5738

aeastman@iup.edu

## Course Overview

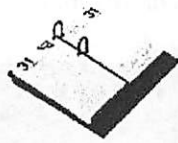
The COURSE SYLLABUS contains information about the course, including required text, assignments, exam schedule, etc. Assignments are listed here and should be cross-referenced with the CALENDAR for assignment deadlines. The COURSE CALENDAR and the COURSE SYLLABUS can be printed for easy referral throughout the semester. Since this is a distance-learning course, each student is responsible for completing the assignments as indicated in the schedule. Therefore, be sure to consult the COURSE CALENDAR AND SYLLABUS on a regular basis. Please use WebCT for all correspondence.

### Let's Get Started!

Click on the links below to review the course syllabus, the course calendar, and the chapter modules. These items and other course materials can be accessed via the Course Menu and the Course Map. You may also go directly to the Gitman website or to Finance Works to complete your assignments. As always, any questions for Dr. Eastman or other students can be addressed through the communications link below.



Course Syllabus



Calendar: Assignments and Due Dates



Chapter Modules



Communication



Finance Works



Student Resources (Gitman Website)

## Chapter Resources

Resources for each chapter include the following: (1) E-book, the complete text in Adobe Acrobat format, complete with live Web Exercise links and links to additional online resources; (2) E-Themes of the Times: a collection of New York Times articles keyed to the chapter, along with review questions; (3) Extra online readings not included in the textbook (not available for all chapters); (4) An online Web Case; (5) The Web Exercise from the textbook; (6) A Self-Study Quiz; and (7) A link to the Case Studies in Finance that are tied to that chapter. Please click on the Student Resources link at the bottom of the page to access the publisher's website for these resources. You may also access Finance Works by clicking the Finance Works link at the bottom of the page. Homework, quizzes and exams are completed at the Finance Works website. Chapter learning goals and specific assignments may be found by clicking on the chapter links below.

**Chapter 1: The Role and Environment of Managerial Finance**

**Chapter 2: Financial Statements and Analysis**

**Chapter 3: Cash Flow and Financial Planning**

**Chapter 4: Time Value of Money**

**Chapter 5: Risk and Return**

**Chapter 6: Interest Rates and Bond Valuation**

**Chapter 7: Stock Valuation**

**Chapter 8: Capital Budgeting Cash Flows**

**Chapter 9: Capital Budgeting Techniques: Certainty and Risk**

**Chapter 11: The Cost of Capital**

**Chapter 14: Working Capital and Current Assets Management**

**Chapter 15: Current Liabilities Management**



**Student Resources (Gitman Website)**



**Finance Works**



## **Chapter 3: Cash Flow and Financial Planning**

### **Course Objectives:**

1. The student will be able to analyze and forecast financial statements, and understand their uses in making financial decisions.

### **Chapter Learning Goals:**

- LG1. Understand tax depreciation procedures and the effect of depreciation on the firm's cash flows.
- LG2. Discuss the firm's statement of cash flows, operating cash flows, and free cash flow.
- LG3. Understand the financial planning process, including long-term (strategic) financial plans and short-term (operating) financial plans.
- LG4. Discuss the cash-planning process and the preparation, evaluation, and use of the cash budget.
- LG5. Explain the simplified procedures used to prepare and evaluate the pro forma income statement and the pro forma balance sheet.
- LG6. Evaluate the simplified approaches to pro forma financial statement preparation and the common uses of pro forma statements.

## **Chapter 3: Cash Flow and Financial Planning**

### **Assignments:**

Read Chapter 3

Complete the homework problems (9 exercises) for chapter 3 at Finance Works.

Complete the quiz for chapter 3 at Finance Works. You may want to take the self-assessment quiz first to prepare yourself for the graded quiz.

Complete the web exercise for chapter 3. Provide your opinion and discuss the issue of corporate taxation on the WebCT discussion board for chapter 3.

Homework - Microsoft Internet Explorer

MathXP

Help Log Out

Homework Chapter 3: Cash Flow & Financial Planning Homework Overview Back to Do Homework

Exercises 1 2 3 4 5 6 7 8 9

Accounting cash flow A firm had earnings after taxes of \$48,100 in 2003. Depreciation charges were \$27,884, and a \$2,319 charge for amortization of a bond discount was incurred. What was the firm's accounting *cash flow from operations* (see Equation 3.1) during 2003?

Accounting cash flow from operations = \$

Enter any number or expression in the edit field, then click Check Answer.

Check Answer Clear Answers Print Homework Submit Homework

Show Me How

- Help Me Solve This
- View an Example
- Textbook Pages
- Ask My Instructor...
- Print...

0 of 9 exercises correct

Assigned homework is accessed through Finance Works. Above is the first exercise from chapter 3. The student completes the exercise by entering his or her answer in the box provided. Students may get help with the question by clicking on the links at the right side of the screen: Help Me Solve This, View an Example, Textbook Pages, or Ask My Instructor.

If the student enters an incorrect answer, the following is displayed:

Homework - Microsoft Internet Explorer

MathXP Help Log Out

Homework Chapter 3: Cash Flow & Financial Planning Homework Overview Back to Do Homework

Exercises 1 2 3 4 5 6 7 8 9 10

Accounting cash flow A firm had earnings after taxes of \$48,100 in 2003. Depreciation charges were \$27,884, and a \$2,319 charge for amortization of a bond discount was incurred. What was the firm's accounting *cash flow from operations* (see Ex

UNDO


$\frac{\square}{\square}$   $\frac{\square}{\square}$

$\frac{\square}{\square}$   $\frac{\square}{\square}$

$\sqrt{\square}$   $\sqrt{\square}$

$\frac{\square}{\square}$   $(\square, \square)$

More ?

A  Sorry, that's not correct.

Depreciation and amortization act as cash inflows to the firm due to the tax shield each provides to the firm, which increases annual cash flows. Therefore, make sure you add the values of both depreciation and amortization to earnings after taxes, not subtract the values from earnings after taxes.

Done

Enter any number or expression in the edit field, then click Check Answer.

0 of 9 exercises correct

Check Answer Clear Answers Print Homework Submit Homework

Show Me How

Help Me Solve This

View an Example

Textbook Pages

Ask My Instructor...

Print...

For assistance, suppose the student clicks on Help Me Solve This. A screen displays the appropriate equation(s) with a brief explanation.

Homework - Microsoft Internet Explorer

MathXL

Help Log Out

Homework Chapter 3: Cash Flow & Financial Planning Homework Overview Back to Do Homework

Exercises 1 2 3 4 5 6 7 8 9

Accounting cash flow A firm had earnings after taxes of \$48,100 in 2003. Depreciation charges were \$27,884, and a \$2,319 charge for amortization of a bond discount was incurred. What was the firm's accounting *cash flow from operations* (see Equation 3.1) during 2003?

1. Accounting cash flow from operations, *AOCF*, is the sum of net profits (or earnings) after taxes, *EAT*, and any noncash charges such as depreciation, *DEPEXP*, and amortization, *AMORT*. To find the accounting cash flow from operations, you can solve for *AOCF* in the following equation:

$$AOCF = EAT + DEPEXP + AMORT$$

Note: if earnings after taxes are negative, an outflow, they are defined as net losses after taxes. In this case, depreciation and amortization would still be added to this outflow and it is possible for the firm to have a positive (inflow) value for accounting cash flow from operations even in years with net losses after taxes.

Click Continue to see more.

Continue Back to Exercise Print Homework Submit Homework

0 of 3 exercises correct

Show Me How

Help Me Solve This

View an Example

Textbook Pages

Ask My Instructor...

Print...

If this help is not sufficient, the student may click on View an Example. The following example appears:

Example

Accounting cash flow A firm had earnings after taxes of \$13,000 in 2003. Depreciation charges were \$1,900, and a \$500 charge for amortization of a bond discount was incurred. What was the firm's accounting *cash flow from operations* (see Equation 3.1) during 2003?

1. Accounting cash flow from operations, *AOCF*, is the sum of net profits (or earnings) after taxes, *EAT*, and any noncash charges such as depreciation, *DEPEXP*, and amortization, *AMORT*. Since depreciation (and amortization) are noncash charges (expenses), they are accounting 'book entries.' In other words, a firm is allowed to write off the cost of capital assets over time, which creates a tax savings (shield), and a check is never written for this 'expense,' which increases annual cash flows. To find the accounting cash flow from operations, you can solve for *AOCF* in the following equation:

$$AOCF = EAT + DEPEXP + AMORT$$

$$= \$13,000 + \$1,900 + \$500$$

$$= \$15,400$$

The accounting cash flows from operations are \$15,400.

The exercise is complete.

Done

The student may continue by clicking on the Textbook Pages, which will display the section of the chapter where accounting cash flows are discussed, or may email the instructor a question.

Suppose, however, that the student enters the correct answer. The exercise is done and the student has the option to go onto the next exercise, or to select a similar exercise for more practice on this topic.

Homework - Microsoft Internet Explorer

MathXP Help Log Out

Homework Chapter 3: Cash Flow & Financial Planning Homework Overview Back to Do Homework

Exercises 1 2 3 4 5 6 7 8 9

**Accounting cash flow** A firm had earnings after taxes of \$45,700 in 2003. Depreciation charges were \$25,681, and a \$2,039 charge for amortization of a bond discount was incurred. What was the firm's accounting *cash flow from operations* (see Equation 3.1) during 2003?

UNDO

Accounting *cash flow from operations* = \$ 73420

The exercise is complete.

of 9 exercises correct

Next Exercise Similar Exercise Print Homework Submit Homework

**Show Me How**

- Help Me Solve This
- View an Example
- Textbook Pages
- Ask My Instructor...
- Print...

The online homework problems are taken from the chapter problems in the textbook. The homework problems for chapter 3 online are difficult to print since they are done in stages. Therefore, I have copied the homework problems from the back of the chapter that will be assigned online.

**Accounting cash flow** A firm had earnings after taxes of \$50,000 in 2003. Depreciation charges were \$28,000, and a \$2,000 charge for amortization of a bond discount was incurred. What was the firm's accounting *cash flow from operations* (see Equation 3.1) during 2003?

**Depreciation and accounting cash flow** A firm in the third year of depreciating its only asset, which originally cost \$180,000 and has a 5-year MACRS recovery period, has gathered the following data relative to the current year's operations.

Accruals	\$ 15,000
Current assets	120,000
Interest expense	15,000
Sales revenue	400,000
Inventory	70,000
Total costs before depreciation, interest, and taxes	290,000
Tax rate on ordinary income	40%

- Use the *relevant data* to determine the accounting *cash flow from operations* (see Equation 3.1) for the current year.
- Explain the impact that depreciation, as well as any other noncash charges, has on a firm's cash flows.

- 3-6 Finding operating and free cash flows** Consider the balance sheets and selected data from the income statement of Keith Corporation that follow.
- Calculate the firm's accounting *cash flow from operations* for the year ended December 31, 2003, using Equation 3.1.
  - Calculate the firm's *operating cash flow (OCF)* for the year ended December 31, 2003, using Equation 3.2.
  - Calculate the firm's *free cash flow (FCF)* for the year ended December 31, 2003, using Equation 3.3.
  - Interpret, compare, and contrast your cash flow estimates in parts a, b, and c.



**Keith Corporation**  
**Balance Sheets**

December 31

Assets	2003	2002
Cash	\$ 1,500	\$ 1,000
Marketable securities	1,800	1,200
Accounts receivable	2,000	1,800
Inventories	2,900	2,800
<b>Total current assets</b>	<b>\$ 8,200</b>	<b>\$ 6,800</b>
Gross fixed assets	\$29,500	\$28,100
Less: Accumulated depreciation	14,700	13,100
Net fixed assets	\$14,800	\$15,000
<b>Total assets</b>	<b>\$23,000</b>	<b>\$21,800</b>
<b>Liabilities and Stockholders' Equity</b>		
Accounts payable	\$ 1,600	\$ 1,500
Notes payable	2,800	2,200
Accruals	200	300
<b>Total current liabilities</b>	<b>\$ 4,600</b>	<b>\$ 4,000</b>
Long-term debt	\$ 5,000	\$ 5,000
Common stock	\$10,000	\$10,000
Retained earnings	3,400	2,800
<b>Total stockholders' equity</b>	<b>\$13,400</b>	<b>\$12,800</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$23,000</b>	<b>\$21,800</b>

**Income Statement Data (2003)**

Depreciation expense	\$11,600
Earnings before interest and taxes (EBIT)	2,700
Taxes	933
Net profits after taxes	1,400

**3-8 Cash disbursements schedule** Maris Brothers, Inc., needs a cash disbursement schedule for the months of April, May, and June. Use the format of Table 3.9 and the following information in its preparation.

*Sales:* February = \$500,000; March = \$500,000; April = \$560,000; May = \$610,000; June = \$650,000; July = \$650,000

*Purchases:* Purchases are calculated as 60% of the next month's sales, 10% of purchases are made in cash, 50% of purchases are paid for 1 month after purchase, and the remaining 40% of purchases are paid for 2 months after purchase.

*Rent:* The firm pays rent of \$8,000 per month.

*Wages and salaries:* Base wage and salary costs are fixed at \$6,000 per month plus a variable cost of 7% of the current month's sales.

*Taxes:* A tax payment of \$54,500 is due in June.

*Fixed asset outlays:* New equipment costing \$75,000 will be bought and paid for in April.

*Interest payments:* An interest payment of \$30,000 is due in June.

*Cash dividends:* Dividends of \$12,500 will be paid in April.

*Principal repayments and retirements:* No principal repayments or retirements are due during these months.

**3-10 Cash budget—Advanced** The actual sales and purchases for Xenocore, Inc., for September and October 2003, along with its forecast sales and purchases for the period November 2003 through April 2004, follow.

Year	Month	Sales	Purchases
2003	September	\$210,000	\$120,000
2003	October	250,000	150,000
2003	November	170,000	140,000
2003	December	160,000	100,000
2004	January	140,000	80,000
2004	February	180,000	110,000
2004	March	200,000	100,000
2004	April	250,000	90,000

The firm makes 20% of all sales for cash and collects on 40% of its sales in each of the 2 months following the sale. Other cash inflows are expected to be \$12,000 in September and April, \$15,000 in January and March, and \$27,000 in February. The firm pays cash for 10% of its purchases. It pays for 50% of its purchases in the following month and for 40% of its purchases 2 months later.

Wages and salaries amount to 20% of the preceding month's sales. Rent of \$20,000 per month must be paid. Interest payments of \$10,000 are due in January and April. A principal payment of \$30,000 is also due in April. The firm expects to pay cash dividends of \$20,000 in January and April. Taxes of \$80,000 are due in April. The firm also intends to make a \$25,000 cash purchase of fixed assets in December.

- Assuming that the firm has a cash balance of \$22,000 at the beginning of November, determine the end-of-month cash balances for each month, November through April.
- Assuming that the firm wishes to maintain a \$15,000 minimum cash balance, determine the required total financing or excess cash balance for each month, November through April.
- If the firm were requesting a line of credit to cover needed financing for the period November to April, how large would this line have to be? Explain your answer.

**3-12 Cash budget—Sensitivity analysis** Trotter Enterprises, Inc., has gathered the following data in order to plan for its cash requirements and short-term investment opportunities for October, November, and December. All amounts are shown in thousands of dollars.

	October			November			December		
	Pessi- mistic	Most likely	Opti- mistic	Pessi- mistic	Most likely	Opti- mistic	Pessi- mistic	Most likely	Opti- mistic
Total cash receipts	\$260	\$342	\$462	\$200	\$287	\$366	\$191	\$294	\$353
Total cash disbursements	285	326	421	203	261	313	287	332	315

- Prepare a sensitivity analysis of Trotter's cash budget using  $-\$20,000$  as the beginning cash balance for October and a minimum required cash balance of  $\$18,000$ .
- Use the analysis prepared in part a to predict Trotter's financing needs and investment opportunities over the months of October, November, and December. Discuss how knowledge of the timing and amounts involved can aid the planning process.

**3-14 Pro forma income statement** The marketing department of Metroline Manufacturing estimates that its sales in 2004 will be  $\$1.5$  million. Interest expense is expected to remain unchanged at  $\$35,000$ , and the firm plans to pay  $\$70,000$  in cash dividends during 2004. Metroline Manufacturing's income statement for the year ended December 31, 2003, is given below, along with a breakdown of the firm's cost of goods sold and operating expenses into their fixed and variable components.

Sales revenue	\$1,400,000
Less: Cost of goods sold	<u>910,000</u>
Gross profits	\$ 490,000
Less: Operating expenses	<u>120,000</u>
Operating profits	\$ 370,000
Less: Interest expense	<u>35,000</u>
Net profits before taxes	\$ 335,000
Less: Taxes (rate = 40%)	<u>134,000</u>
Net profits after taxes	\$ 201,000
Less: Cash dividends	<u>66,000</u>
To retained earnings	<u>\$ 135,000</u>

Cost of goods sold	
Fixed cost	\$210,000
Variable cost	<u>700,000</u>
Total cost	<u>\$910,000</u>
Operating expenses	
Fixed expenses	\$ 36,000
Variable expenses	<u>84,000</u>
Total expenses	<u>\$120,000</u>

- Use the *percent-of-sales method* to prepare a pro forma income statement for the year ended December 31, 2004.
- Use *fixed and variable cost data* to develop a pro forma income statement for the year ended December 31, 2004.
- Compare and contrast the statements developed in parts a and b. Which statement probably provides the better estimate of 2004 income? Explain why.

- 3-16 Pro forma balance sheet—Basic Leonard Industries wishes to prepare a pro forma balance sheet for December 31, 2004. The firm expects 2004 sales to total \$3,000,000. The following information has been gathered.
- A minimum cash balance of \$50,000 is desired.
  - Marketable securities are expected to remain unchanged.
  - Accounts receivable represent 10% of sales.
  - Inventories represent 12% of sales.
  - A new machine costing \$90,000 will be acquired during 2004. Total depreciation for the year will be \$32,000.
  - Accounts payable represent 14% of sales.
  - Accruals, other current liabilities, long-term debt, and common stock are expected to remain unchanged.
  - The firm's net profit margin is 4%, and it expects to pay out \$70,000 in cash dividends during 2004.
  - The December 31, 2003, balance sheet follows.

**Leonard Industries**  
**Balance Sheet**  
**December 31, 2003**

<b>Assets</b>		<b>Liabilities and Stockholders' Equity</b>	
Cash	\$ 45,000	Accounts payable	\$ 395,000
Marketable securities	15,000	Accruals	60,000
Accounts receivable	255,000	Other current liabilities	<u>30,000</u>
Inventories	<u>340,000</u>	Total current liabilities	\$ 485,000
Total current assets	\$ 655,000	Long-term debt	\$ 350,000
Net fixed assets	<u>\$ 600,000</u>	Common stock	\$ 200,000
Total assets	<u><u>\$1,255,000</u></u>	Retained earnings	<u>\$ 220,000</u>
		Total liabilities and stockholders' equity	<u><u>\$1,255,000</u></u>

- a. Use the *judgmental approach* to prepare a pro forma balance sheet dated December 31, 2004, for Leonard Industries.
- b. How much, if any, additional financing will Leonard Industries require in 2004? Discuss.
- c. Could Leonard Industries adjust its planned 2004 dividend to avoid the situation described in part b? Explain how.

3-18 Integrative—Pro forma statements Red Queen Restaurants wishes to prepare financial plans. Use the financial statements and the other information provided in what follows to prepare the financial plans.

**Red Queen Restaurants**  
**Income Statement for the**  
**Year Ended December 31, 2003**

Sales revenue	\$800,000
Less: Cost of goods sold	<u>600,000</u>
Gross profits	\$200,000
Less: Operating expenses	<u>100,000</u>
Net profits before taxes	\$100,000
Less: Taxes (rate = 40%)	<u>40,000</u>
Net profits after taxes	\$ 60,000
Less: Cash dividends	<u>20,000</u>
To retained earnings	<u><u>\$ 40,000</u></u>

**Red Queen Restaurants**  
**Balance Sheet**  
**December 31, 2003**

Assets		Liabilities and Stockholders' Equity	
Cash	\$ 32,000	Accounts payable	\$100,000
Marketable securities	18,000	Taxes payable	20,000
Accounts receivable	150,000	Other current liabilities	5,000
Inventories	100,000	Total current liabilities	\$125,000
Total current assets	<u>\$300,000</u>	Long-term debt	\$200,000
Net fixed assets	<u>\$350,000</u>	Common stock	\$150,000
Total assets	<u>\$650,000</u>	Retained earnings	<u>\$175,000</u>
		Total liabilities and stockholders' equity	<u>\$650,000</u>

The following financial data are also available:

- (1) The firm has estimated that its sales for 2004 will be \$900,000.
  - (2) The firm expects to pay \$35,000 in cash dividends in 2004.
  - (3) The firm wishes to maintain a minimum cash balance of \$30,000.
  - (4) Accounts receivable represent approximately 18% of annual sales.
  - (5) The firm's ending inventory will change directly with changes in sales in 2004.
  - (6) A new machine costing \$42,000 will be purchased in 2004. Total depreciation for 2004 will be \$17,000.
  - (7) Accounts payable will change directly in response to changes in sales in 2004.
  - (8) Taxes payable will equal one-fourth of the tax liability on the pro forma income statement.
  - (9) Marketable securities, other current liabilities, long-term debt, and common stock will remain unchanged.
- a. Prepare a pro forma income statement for the year ended December 31, 2004, using the *percent-of-sales method*.
  - b. Prepare a pro forma balance sheet dated December 31, 2004, using the *judgmental approach*.

### Chapter 3

## Self-Assessment Quiz

- 1 . The system commonly used to determine the depreciable of assets for tax purposes is known as \_\_\_\_\_.
- modified accelerated cost recovery system (MACRS).
  - tax-incentive rapid depreciation directions. (TIRDD).
  - financial accountings standards (FAS).
  - generally-accepted accounting procedures (GAAP).

- 2 . Financing flows would include each of the following, except:
- issuance of debt.
  - cash dividends.
  - purchase of a new truck.
  - stock repurchase.

- 3 . Which of the following is an example of a noncash charge?
- dividend payment
  - taxes
  - interest payment
  - depreciation

- 4 . Information for problems 4 - 6 is given below. In its 2003 fiscal year, Newport Printing had \$500,000 in net profit after taxes, \$400,000 of which was paid out as a dividend to shareholders.

**Newport Printing Balance Sheets (\$000)**

	2004	2003
Current Assets		
Cash	\$300	\$425
Accounts Receivable	\$550	\$625



Inventory	<u>\$475</u>	<u>\$850</u>
Total Current Assets	\$1,325	\$1,900
Gross Fixed Assets		
Machinery	\$12,000	\$10,500
Less: Depreciation	<u>\$ 5,275</u>	<u>\$ 4,800</u>
Net Fixed Assets	<u>\$6,725</u>	<u>\$5,700</u>
Total Assets	<u>\$8,050</u>	<u>7,600</u>
Current Liabilities		
Accounts Payable	\$475	\$400
Accruals	<u>\$200</u>	<u>\$150</u>
Total Current Assets	\$675	\$550
Long-Term Debt	\$1,600	\$1,800
Stockholder's Equity	<u>\$5,775</u>	<u>\$5,250</u>
Total Liabilities and Stockholders' Equity	<u>\$8,050</u>	<u>\$7,600</u>

4. What was Newport Printing's cash flow from operations?

- \$1,300,000
- \$1,550,000
- \$600,000
- \$975,000

5 . What is the cash flow from investing activities?

- \$450,000
- \$1,500,000
- \$12,000,000
- \$1,500,000

6 . What is the cash flow from financing activities?

- \$325,000
- \$175,000
- \$225,000
- \$75,000

- \$75,000

7. The financial planning process starts with \_\_\_\_\_.

- operating financial plans.
- short-term financial plans.
- strategic financial plans.
- the cash budget.

8. \_\_\_\_\_ forecasts are based on the relationships observed between the firm's sales and key economic indicators.

- "Rain or Shine"
- Internal sales
- Consensus
- External sales

9. Newport Printing has a minimum cash balance of \$250,000 and a cash balance at the beginning of October of \$300,000. If cash receipts are forecast to be \$165,000 and disbursements are \$290,000 during the month, how much additional financing is anticipated?

- \$75,000
- \$125,000
- \$40,000
- no additional financing is needed

10. \_\_\_\_\_ statements are projected income statements and balance sheets.

- Historical
- Cash budget
- Pro forma
- Fully-audited

11 Which of the following is not included on a cash budget?

- depreciation
- dividends
- payments of accounts payable
- interest payments

*Answer choices in this exercise are randomized and will appear in a different order each time the page is loaded.*

Quiz Chapter 3

Name \_\_\_\_\_

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

- 1) A corporation
  - A) must use the same depreciation method for tax and financial reporting purposes.
  - B) must use different (from for tax purposes), but strictly mandated, depreciation methods for financial reporting purposes.
  - C) may use different depreciation methods for tax and financial reporting purposes.
  - D) must use different depreciation methods for tax and financial reporting purposes.
  
- 2) The depreciable life of an asset is of concern to the financial manager, and
  - A) a shorter depreciable life is preferred, because it will result in a faster receipt of cash flows.
  - B) a shorter depreciable life is preferred, because management can then purchase new assets, as the old assets are written off.
  - C) a longer depreciable life is preferred, because it will result in a faster receipt of cash flows.
  - D) a longer depreciable life is preferred, because management can postpone purchasing new assets, since the old assets still have a useful life.
  
- 3) Under MACRS, an asset which originally cost \$100,000, incurred installation costs of \$10,000, and has an estimated salvage value of \$25,000, is being depreciated using a 5-year normal recovery period. What is the depreciation expense in year 1?
  - A) \$15,000
  - B) \$12,750
  - C) \$22,000
  - D) \$11,250
  
- 4) Johnson, Inc. has just ended the calendar year making a sale in the amount of \$10,000 of merchandise purchased during the year at a total cost of \$7,000. Although the firm paid in full for the merchandise during the year, it has yet to collect at year end from the customer. The net profit and cash flow for the year are
  - A) \$3,000 and \$7,000 respectively.
  - B) \$7,000 and -\$3,000 respectively.
  - C) \$3,000 and \$10,000 respectively.
  - D) \$3,000 and -\$7,000 respectively.

FIGURE 3.1

RUFF SANDPAPER CO.  
Balance Sheets  
For the Years Ended 2002 and 2003

	2003	2002
<b>Assets</b>		
Cash	800	600
Marketable securities	200	200
Accounts receivable	1,200	1,000
Inventories	2,000	1,800
Gross fixed asset	3,000	2,800
Less Accumulated Depreciation	1,000	800
Net fixed assets	2,000	2,000
<b>Total assets</b>	<b>6,200</b>	<b>5,600</b>
<b>Liabilities</b>		
Accounts payable	200	100
Notes payable	800	900
Accruals	100	100
Long-term debt	2,000	1,500
<b>Stockholders' equity</b>		
Common stock at par	500	500
Paid-in capital in excess of par	2,000	2,000
Retained earnings	600	500
<b>Total liabilities and equity</b>	<b>6,200</b>	<b>5,600</b>

Net profits after taxes for 2003: \$150.00

- 5) The firm's cash flow from operations is \_\_\_\_\_. (See Figure 3.1.)  
 A) \$150                      B) \$950                      C) \$300                      D) \$350
- 6) The depreciation expense for 2003 is \_\_\_\_\_. (See Figure 3.1.)  
 A) \$200                      B) \$50                      C) \$1,000                      D) \$0
- 7) For the year ended December 31, 2003, a corporation had cash flow from operating activities of \$12,000, cash flow from investment activities of -\$10,000, and cash flow from financing activities of \$4,000. The Statement of Cash Flows would show a  
 A) net decrease of \$6,000 in cash and marketable securities.  
 B) net increase of \$6,000 in cash and marketable securities.  
 C) net decrease of \$18,000 in cash and marketable securities.  
 D) net increase of \$2,000 in cash and marketable securities.

- 8) Which of the following would be the least likely to utilize pro forma financial statements or a cash budget:
- A) lenders.
  - B) investors.
  - C) top management.
  - D) middle management.
- 9) A firm has projected sales in May, June, and July of \$100, \$200, and \$300, respectively. The firm makes 20 percent of sales in cash and collects the balance one month following the sale. The firm's total cash receipts in July
- A) are \$180.
  - B) are \$220.
  - C) are \$200.
  - D) cannot be determined with the information provided.
- 10) A firm has actual sales in November of \$1,000 and projected sales in December and January of \$3,000 and \$4,000, respectively. The firm makes 10 percent of its sales in cash, collects 40 percent of its sales one month following the sale, and collects the balance two months following the sale. The firm's total expected cash receipts in January
- A) are \$2,100.
  - B) are \$1,900.
  - C) are \$700.
  - D) cannot be determined with the information provided.
- 11) In the month of August, a firm had total cash receipts of \$10,000, total cash disbursements of \$8,000, depreciation expense of \$1,000, a minimum cash balance of \$3,000, and a beginning cash balance of \$500. The ending cash balance for August totals \_\_\_\_\_.
- A) \$1,500
  - B) \$5,500
  - C) \$3,500
  - D) \$2,500

FIGURE 3.5

A financial manager at General Talc Mines has gathered the financial data essential to prepare a pro forma balance sheet for cash and profit planning purposes for the coming year ended December 31, 2004. Using the percent-of-sales method and the following financial data, prepare the pro forma balance sheet in order to answer the following multiple choice questions.

- A. The firm estimates sales of \$1,000,000.
- B. The firm maintains a cash balance of \$25,000.
- C. Accounts receivable represents 15 percent of sales.
- D. Inventory represents 35 percent of sales.
- E. A new piece of mining equipment costing \$150,000 will be purchased in 2004. Total depreciation for 2004 will be \$75,000.
- F. Accounts payable represents 10 percent of sales.
- G. There will be no change in notes payable, accruals, and common stock.
- H. The firm plans to retire a long term note of \$100,000.
- I. Dividends of \$45,000 will be paid in 2004.
- J. The firm predicts a 4 percent net profit margin.

Balance Sheet  
General Talc Mines  
December 31, 2003

**Assets**

Cash	\$ 25,000
Accounts receivable	120,000
Inventories	300,000
	-----
Total current assets	\$ 445,000
Net fixed assets	\$ 500,000
	-----
Total assets	\$ 945,000

**Liabilities and stockholders' equity**







Accounts payable	\$ 80,000	
Notes payable	350,000	
Accruals		50,000
	-----	
Total current liabilities	\$ 480,000	
Long-term debts	150,000	
	-----	
Total liabilities	\$ 630,000	
Stockholders' equity		
Common stock	\$ 180,000	
Retained earnings	135,000	
	-----	
Total Stockholders' equity	\$ 315,000	
	-----	
Total liabilities and stockholders' equity	\$ 945,000	

- 12) The pro forma accumulated retained earnings amount is \_\_\_\_\_. (See Figure 3.5.)  
 A) \$175,000                      B) \$140,000                      C) \$130,000                      D) \$90,000
- 13) The external financing required in 2004 will be \_\_\_\_\_. (See Figure 3.5.)  
 A) \$240,000                      B) \$0                                  C) \$230,000                      D) \$195,000
- 14) The external funds requirement results primarily from (See Figure 3.5.)  
 A) low profit margin.  
 B) high cost of sales.  
 C) the retirement of debt and purchase of new fixed assets.  
 D) the payment of dividends.
- 15) In a period of rising sales, utilizing past cost and expense ratios (percent-of-sales method) when preparing pro forma financial statements will tend to  
 A) understate costs and overstate profits.                      B) understate costs and understate profits.  
 C) overstate costs and overstate profits.                      D) overstate costs and understate profits.

## Group Exercise

Depreciation is an intricate topic, complicated greatly by the tax law. This exercise is meant to extend the description in the text to the real world of compliance under IRS regulations. Financial planning analysis and statement preparation will follow, as you will be asked to continue analyzing your shadow firm's financial reports and prepare projected statements.

### TO DO

-  a. Visit the IRS's Web site at [www.irs.gov](http://www.irs.gov). Click on the link for information for businesses located on the left side of the IRS home page. Next, click on the link for information for corporations. At the bottom of the page, click on the link for forms and publications. The tenth link on this page is the topical index for forms and publications. Go to this link. Highlight "D" for depreciation. Now scroll down to Depreciating Property and highlight "Primary publication number 946." Using the explanations provided, give several examples of property that your fictitious firm is depreciating.
-  b. Return to the 10-K filing for your shadow firm.
  - (1) Using a time-series approach, describe changes in your shadow firm's statement of cash flows.
  - (2) As you did with the ratio analysis in Chapter 2, provide possible explanations for the changes you have noted.
  - (3) Extend this analysis to your own firm by using these possible explanations within the context of your fictitious firm.
-  c. Begin the financial planning analysis of your shadow firm by viewing the strategy section of the annual report. Make a note of short- and long-term planning. Now apply these real details to your fictitious firm.
-  d. Develop a cash budget for your fictitious firm for the following year. Pay close attention to inflow and outflow assumptions.
-   e. Take the most recent corporate filings and develop pro forma statements for your shadow corporation. Keep it simple here. Likewise, keep evaluations of these pro forma statements simple.

## Web Exercise



Taxation is forever a part of our lives. This is true of individuals as well as of corporations. This exercise looks at some tax-related issues for corporations.

- a. Visit the IRS's Web site at [www.irs.gov/index.html](http://www.irs.gov/index.html). Go to Tax Stats. Here the IRS provides information in various forms regarding tax filing. View Tax Stats at a Glance. Look for information dealing with corporate income taxes. There has been serious debate in the past about eliminating the corporate income tax due to its high compliance costs relative to the amount of revenue raised by the tax. Concerns have also been raised regarding the double taxation of dividends. Because dividends are paid with after-tax dollars, elimi-



nating the corporate income tax would eliminate the double taxation. Citing data contained on this page, discuss the merits of reducing or eliminating corporate income taxation. Would you advocate raising the ceiling so that only the largest corporations, as measured by assets, are taxed?

- b. Use the link for Statistics by Topic to look up Corporate Tax Statistics. Find and describe the changes in relative importance of S-corporations as compared with total corporate filings. This information can be found under S-Corporations and then as a publication dated 2004, Selected Returns and Forms, Table #22. Within the same table, information is broken down across eight categories. Compare the relative numbers of returns filed.

**Remember to check the book's Web site at**

**[www.aw-bc.com/gitman](http://www.aw-bc.com/gitman)**

**for additional resources, including additional Web exercises.**