

HPAA 743 Healthcare Finance II

Course Objectives

Class time: Wednesdays, 1400-1650
Class location:

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Introduction

The goal of managerial decision-making is to make judgments that will result in increased efficiency and effectiveness. Accountability for these decisions comes from both within the organization and from outside, and is concerned with either short-term impacts, the day-to-day operations, or with strategic, long-term concerns that ultimately impact on the financial viability and integrity of the firm. It can generally be assumed that almost all activities within the organization, and all decisions made on behalf of the organization, can have financial implications.

The financial statements of an organization are a reflection of all activities that have taken place, both from an operational standpoint, and from a financial management standpoint. In today's environment the only certainty is change. There is a great deal of risk within the economy, the health care industry, and each individual firm. The financial marketplace places a premium on stability. Thus there is a major conflict between the desires of the market and the realities of the health care industry. Managerial decision-making must balance the risks that are the result of change and the stability desired by the market. This course will focus on evaluation and measurement of that risk.

Course objectives

The course objectives are based on the core competencies in healthcare finance developed by an AUPHA task force. The core competencies that follow are intended to identify behavioral competencies in healthcare finance that all program graduates should possess; however, the measurable skills that define a behavioral competency are intended to reflect only the range of management practice, and not to prescribe a skill complement deemed minimally necessary. The measurable skills listed below reflect the mission and goals of the UNC-Chapel Hill program. The core competencies are organized by:

- Subject domain (Levels I, II, III)
- Behavioral competency (Levels A, B, C)
- Measurable skill (Levels 1, 2, 3)

I. Financial Management in Healthcare Organizations

- A. Demonstrate an understanding of the function of financial management in healthcare organizations.
 - 1. Evaluate the financial structure of an organization with respect to its ability to support and advance the organization's mission.
 - 2. Evaluate the influence of ownership status on an organization's financial goals and objectives, and on the financial practices within an organization.
- B. Demonstrate an understanding of the function of the chief financial officer in the management of healthcare organizations.
 - 1. Differentiate between the essential functions of organizational units that report to the chief financial officer including treasury, controllership, and internal audit functions.
 - 2. Recognize ethical issues that arise in financial decision making and formulate solutions consistent with an organization's financial and ethical obligations.

II. Financing and Investment Decisions

- A. Demonstrate an understanding of how organizations make investment decisions and allocate capital among competing investment opportunities.
 - 1. Compute the present value and future value of a stream of cash flows.
 - 2. Perform an investment decision analysis using the net present value, internal rate of return, accounting rate of return, and payback methods; and differentiate between the advantages and disadvantages associated with each method.
 - 3. Analyze the risk of an investment in isolation and in terms of its contribution to the risk of a portfolio of investments.
 - 4. Distinguish between systematic and nonsystematic risk, use the Capital Asset Pricing Model to estimate the risk-adjusted cost of capital; and compute the weighted average cost of capital for a mix of financing sources.
 - 5. Construct a capital budget from a set of competing investment opportunities.
- B. Demonstrate an understanding of capital markets and how organizations use these markets to acquire capital used to finance operations.
 - 1. Distinguish between basic categories of corporate securities including stocks, bonds, and derivatives.
 - 2. Evaluate the impact of ownership status, organizational form, and financial structure on potential sources of capital, the ability to obtain capital, and the cost of raising capital.
 - 3. Compute the market value and implied rate of interest for conventional debt instruments including bank loans, corporate bonds, and lease contracts.

4. Evaluate the impact of changes in interest rates and maturity on the market value of debt instruments.
5. Evaluate the contribution of financial leverage to an organization's financial risk, creditworthiness, and the cost of obtaining capital.

III. Financial Analysis, Planning, and Control

- A. Demonstrate an understanding of financial accounting systems and how managers use financial information and budgets to evaluate and control organizations.
 1. Use financial metrics to evaluate an organization's liquidity, performance, and capital structure.
- B. Demonstrate an understanding of how organizations finance the daily production of goods and services.
 1. Evaluate an organization's working capital policy in terms of its investment in current assets and how it finances those assets.
 2. Trace the revenue cycle beginning with the acquisition of working capital through the production, credit and billing, and collections processes.
 3. Evaluate the efficiency of an organization's cash collections process using the accounts receivable aging schedule and the uncollected balances schedule.
 4. Evaluate the use of trade credit as a source of financing.
- C. Demonstrate an understanding of how organizations use business and financial plans to manage growth and create value.
 1. Evaluate an organization's need for future financing using a cash budget. (FF)
 2. Evaluate the strengths and weaknesses of a pro forma income statement and balance sheet prepared using the percentage of sales method.
 3. Evaluate the structure of an organization's financial planning process in terms of its ability to link organizational goals with organizational resources.

IV. Health Services Payment Systems

- A. Demonstrate an understanding of the payment methods used to reimburse health service providers and the associated operational implications.
 1. Differentiate between the charge-based, cost-based, case-based, and capitated payment systems used to reimburse institutional health service providers.
 2. Differentiate between fee-for-service, resource-based relative value schedules, capitation, risk-based incentives, and salary structures as payment methods for medical service providers.
 3. Evaluate the financial stability of healthcare organizations under retrospective and prospective payment mechanisms.

4. Evaluate the expected incentive effects of the alternative payment systems on provider behavior and the quality of care.
- B. Demonstrate an understanding of the role of health insurance in financing healthcare services.
1. Differentiate between the role and purpose of private market and government-sponsored health insurance in the financing of health services.
 2. Differentiate between the characteristics of integrated organizations/networks that combine financing with the active management of service delivery.
- V. Group and process skills (added by G Pink)
- A. To work effectively and efficiently with team members on a financial analysis.
 - B. To present and defend an analysis and recommendations of a financial analysis.
 - C. To critically evaluate the method and recommendations of a financial analysis.
 - D. To present an analysis of a current issue in healthcare financial management

Honor Code

The Honor Code is in effect in this class and all others at the University. I am committed to treating Honor Code violations seriously and urge all students to become familiar with its terms set out at <http://instrument.unc.edu>. If you have questions, it is your responsibility to ask me about the Code's application. All written work must be submitted with a statement that you have complied with the requirements of the Honor Code in all aspects of the submitted work. **In addition, students promise not to give or disclose case solutions distributed in the course to anyone.**

Course Evaluation

The Department of Health Policy and Administration is participating in the Carolina Course Evaluation System (CES), the university's new online course evaluation tool, enabled at the end of each semester. Your responses will be anonymous, with feedback provided in the aggregate; open-ended comments will be shared with instructors, but not identified with individual students. Your participation in CES is a course requirement, as providing constructive feedback is a professional expectation. Such feedback is critical to improving the quality of our courses, as well as providing input to the assessment of your instructors.

Evaluation Method and Criteria

Team Evaluation

Completion of 1 set of practice problems evaluates whether teams can analyze, perform calculations, and develop solutions to practical healthcare finance problems.

Written presentation of 8 cases evaluates whether teams can analyze, perform calculations, and develop solutions to practical healthcare finance problems. After a case is submitted, written feedback will be provided to each team about strengths and opportunities for improvement in their written presentation skills.

Oral presentation of 1 case evaluates whether teams can present, explain, and defend analysis, calculations, and solutions to a practical healthcare finance problem. After a case is presented, written feedback will be provided to a team about strengths and opportunities for improvement in their oral presentation skills.

Oral response to 1 case evaluates whether teams can critically assess the method and recommendations of a financial analysis of a practical healthcare finance problem.

Oral presentation of 1 ethical issue analysis evaluates whether teams can analyze an important ethical issue and identify implications for management.

Individual Evaluation

Completion of 7 sets of practice problems evaluates whether individuals can analyze, perform calculations, and develop solutions to practical healthcare finance problems.

Final examination evaluates whether individuals can apply what they have learned in the course to practical healthcare finance problems.

Grade Components

<i>Team grade</i>	Completion of 1 set of practice problems	3%
	Written presentation of 8 cases @ 4.5% each	36%
	Oral presentation of 1 case	5%
	Oral response to 1 case	1%
	Oral presentation of 1 ethical issue analysis	<u>5%</u>
		50%
<i>Individual grade</i>	Completion of 7 sets of practice problems @ 3% each	21%
	Final examination	<u>29%</u>
		50%
Total		100%

Grading Scale

The following scale will be used to convert points to class grade:

Grade	Final Percent
H	90 – 100
P+	80 – 89
P	70 – 79
L	60 – 69
F	< 60

Bonus Points

I created the practice problems and overheads for Understanding Healthcare Financial Management. The Fourth Edition of the textbook is the first to include these teaching materials. To help Lou Gapenski and me test these practice problems and overheads and to identify other possible revisions to the teaching materials, bonus points are available to students who identify errors in any of the following course materials:

- Understanding Healthcare Financial Management, Fourth Edition (UHFM)
- Chapter models to accompany UHFM
- Lecture presentation software (PowerPoint slides) to accompany UHFM
- Practice problems (Excel spreadsheets) to accompany UHFM

0.5 point will be awarded for each typographical error and 1.0 point for calculation or interpretation errors. Only the first person to report an error to the instructor is eligible for the bonus points. Previously identified errors are reported in the required reading file. For the record, I will not gain financially or in any other way through identification of errors in the teaching materials by students. The sole purpose of the bonus points is to reduce student frustration of working with erroneous teaching materials.

Evaluation Criteria for Practice Problems

The expectation is for students to attempt to answer the practice problems – correct answers to the practice problems are not expected. Marks for the practice problems will be based on the following ratio:

$$\frac{\text{Number of checked / corrected answers}}{\text{Total number of practice problems}} \times 3 \text{ percent}$$

Checked / corrected answers to all practice problems will receive full marks.

Evaluation Criteria for Written Presentations

%	Description
90 to 100	<p>A grade in this range is for exceptional work at the graduate level. The work must be exceptional in both its analytics and presentation. The analysis must show an exceptional understanding of the issues in the case and applicable methods. The written presentation must be insightful in perspective, be presented in an exceptionally clear manner, and conform to generally accepted writing conventions such as spelling and grammar. It identifies and clearly addresses all materially significant issues. Tables and charts, [though integrated into the paper], must stand-alone, provide clarity and/or insight to the point being made, and be exceptionally clear in their presentation. Tables and charts should be used to help the reader quickly and clearly understand major points. [Thus they should not be repeated in the text, but only introduced and their key points summarized.] The appendices should be pertinent to the reader's understanding of the points being made and be presented in a manner which is exceptionally easy to follow. The numerical analysis contained in the appendices must go beyond that generally expected, be appropriate and insightful, free of material errors and be presented in an exceptionally clear manner. In general, the oral presentation has the following characteristics: problem definition is precise; all calculations are correct; all interpretations of calculations are appropriate; no major analyses are missing; the flow of analysis is logical; the narrative is succinct and comprehensible; comprehensive understanding of the problem and the solution is demonstrated; and there are no errors in grammar or spelling.</p>
70 to 89	<p>A grade in this range is for generally acceptable work at the graduate level. The work must be acceptable in both its analytics and presentation. The written presentation must show a firm understanding of the issues in the case and the applicable methods, and communicate at a relatively high, but not exceptional level. The presentation is logically presented and easy to follow, and conforms to the criteria given above in regard to the use of tables, appendices and generally accepted writing conventions. The methods used are appropriate and validly applied, free of any major errors, and presented in a clear manner. Though difficult to define, no major section should look like it needs at least one more draft to clearly communicate.</p>
60 to 69	<p>A grade in this range is for a low level of work at the graduate level. Though it shows a basic acquaintance with the issues and methods, it has either a significant deficiency in one of the following areas or several smaller but cumulatively important deficiencies in several of the following areas: recognizing and addressing key points, identification and use of appropriate analytical tools, calculation errors and ability to clearly communicate through the use of prose, tables and graphics, and appendices.</p>
< 60	Below acceptable graduate level work.

Evaluation Criteria for Oral Presentations

<u>%</u>	Description
90 to 100	<p>A grade in this range is for exceptional work at the graduate level. The work must be exceptional in both its analytics and presentation. The analysis must show an exceptional understanding of the issues in the case and applicable methods. The oral presentation must be insightful in perspective and be presented in an exceptionally clear manner. It has identified and clearly addressed all materially significant issues. Tables and charts provide clarity and/or insight to the point being made, and be exceptionally clear in their presentation. Tables and charts should be used to help the audience quickly and clearly understand major points. In general, the oral presentation has the following characteristics: the outcome/purpose is clear; each presenter's role is clear; a statement of intent, expected benefits, organisation, and ground rules are included; ideas are presented in a logical sequence; audience participation is handled appropriately; credible arguments are included; the conclusion is appropriate and includes a summary and proposed actions or options; audiovisual aids are used effectively; any unexpected occurrences are handled well; enthusiasm for the subject is conveyed; a variety in presentation styles/formats is used; space and movement are used well; gestures are appropriate; questions are readily handled; responses are candid and firm; control is effectively maintained.</p>
70 to 89	<p>A grade in this range is for generally acceptable work at the graduate level. The work must be acceptable in both its analytics and presentation. Oral presentations in this range show a firm understanding of the issues in the case and the applicable methods, and communicate at a relatively high, but not exceptional level. The presentation is logically presented and easy to follow, and conforms to the criteria given above. The methods used are appropriate and appropriately applied, free of any major errors, and are presented in a clear manner.</p>
60 to 69	<p>A grade in this range is for a low level of work at the graduate level. Though it shows a basic acquaintance with the issues and methods, it has either a significant deficiency in one of the following areas or several smaller but cumulatively important deficiencies in several of the following areas: recognizing and addressing key points, identification and use of appropriate analytical tools, calculation errors and ability to clearly communicate.</p>
< 60	<p>Below acceptable graduate level work.</p>

Required Reading

Understanding Healthcare Financial Management (UHF M), Fifth Edition, Louis C. Gapenski, AUPHA Press / Health Administration Press, 2007, ISBN-13:978-1-56793-264-5, hard cover 715 pages. As errors are identified, AUPHA Press / Health Administration Press make corrections so that subsequent printings are correct. Your copy of the fifth edition of UHF M may or may not have the following errors which have been previously identified:

Page 95, spreadsheet diagram. In cell A3, “\$(100.005)” should read “\$(100.00)”

Page 99, spreadsheet diagram. In cell B8, “=A3/A2” should read “=A3/A4”

Page 231, spreadsheet diagram. In cell B20, “=IRR(A4:A18:A2)” should read “=IRR(A4,A18:A2)”

Page 233, spreadsheet diagram. In cell B8, “=-PV(A5,A2,A4)” should read “=-PV(A5,A2,A3,A4)”

Page 394, second sentence under bullet Line 12. “Taxes, which appear on Line 12, are computed by multiplying the Line 12 pretax operating cash flow by the business’s marginal tax rate” should read “Taxes, which appear on Line 12, are computed by multiplying the Line 11 pretax operating cash flow by the business’s marginal tax rate.”

Cases in Healthcare Finance Third Edition (CIHF), Louis C. Gapenski, AUPHA Press / Health Administration Press, 2006, ISBN 1-56793-244-4, soft cover 239 pages. As errors are identified, AUPHA Press / Health Administration Press make corrections so that subsequent printings are correct. Your copy of the third edition of CIHF may or may not have the following errors which have been previously identified:

Page 177. Change Note 4 of Table 24.2 to read as follows: “Operating expenses consist of a fixed component plus a variable component. The best estimates for this year are a fixed component of \$719,997 and a variable component of \$349,079. Thus, the current variable operating expenses expressed as a percentage of net revenues is 23.4 percent.”

Case 22 spreadsheet. The two references to “Palmetto General Hospital” should read “Avalon General Hospital.” In Cell A99, the reference to cost savings at “University” should read “Mount Olive.”

Schedule

Understanding Healthcare Financial Management					Cases in Healthcare Finance		
Date	Topic	Reading and Spreadsheet	Practice Problems	Team Presenting Practice Problems	Case and Spreadsheet	Team Presenting Case	Team Responding to Case
Jan 9	Introduction						
Jan 16	The basics of capital budgeting	Chapter 11 Chapter11.xls	Chapter 11	Team 1			
Jan 23	Project risk analysis	Chapter 12 Chapter12.xls	Chapter 12	Team 2			
Jan 30					Case 19. Florida Keys Hospital (Traditional project analysis). STUCASE19.XLS	Team 4	Team 7
Feb 6	Financial condition analysis	Chapter 13 Chapter13.xls	Chapter 13	Team 3	Case 26. Martha Washington Hospital (Competing technologies with backfill). STUCASE26.XLS	Team 5	Team 8
Feb 13					Case 1. Creekside Community Hospital (A) (Assessing hospital performance). STUCASE01.XLS Ethical issue analysis 1 Ethical issue analysis 2	Team 6 Team 2 Team 3	Team 1
Feb 20	Financial forecasting	Chapter 14 Chapter14.xls	Chapter 14	Team 4			
Feb 27					Case 8. Snowmass Village Clinic (Cash budgeting). STUCASE08.XLS Ethical issue analysis 3 Ethical issue analysis 4	Team 7 Team 4 Team 5	Team 2
Mar 5	Working capital management	Chapter 15 Chapter15.xls	Chapter 15	Team 5			
Mar 12	Spring break						
Mar 19					Case 27. Beltline Pharmaceuticals (Receivables management). STUCASE27.XLS Ethical issue analysis 5 Ethical issue analysis 6	Team 8 Team 6 Team 7	Team 3
Mar 26	Business valuation, mergers, and acquisitions	Chapter 16 Chapter16.xls	Chapter 16	Team 6			
Apr 2					Case 22. Mount Olive Teaching Hospital (Merger analysis). STUCASE22.XLS	Team 1	Team 4
Apr 9					Case 24. Madison Clinics (Practice valuation). STUCASE24.XLS Ethical issue analysis 7 Ethical issue analysis 8	Team 2 Team 8 Team 1	Team 5
Apr 16	Capitation, rate setting, and risk sharing	Chapter 17	Chapter 17	Team 7			
Apr 23	Financial risk management	Chapter 18 Chapter18.xls	Chapter 18	Team 8	Case 30. Silverton Healthcare (Capitation and risk sharing). STUCASE30.XLS	Team 3	Team 6