Imperial College

London

BSc in Medical Sciences with MANAGEMENT NB - This is not an option available to B900-Biomedical Science students

Course Director

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Imperial Business School

Programme Structure

Modules on the Joint Honours Programme are run in 5 week blocks. There will be 4 hours tuition in each subject each week. Classes for Accounting will take place over a 10 week period.

Autumn Term

(Week 1 – Induction Week)

Weeks

2 6	7 11
Health Service Research	Business Strategy
Accounting	Organisational Behaviour &
	Human Resource Management
Information Systems Healthcare	

Group Project – identification and development of project proposal at the beginning of the Autumn Term

Examinations for these modules take place at the beginning of the Spring Term except for Health Services Research which is 100% coursework

Spring Term

(Week 15 - Exam Week)

Weeks

16 20	21 25
Health Economics	Entrepreneurship
Project Management	Marketing
Managing Health Care Organisations	

Group Project work will start towards the end of the Spring Term

Examinations for these modules (with the exception of the group project which is assessed formally by a presentation and written report at the end of the Summer Term) will take place at the beginning of the summer term.

Summer Term (Week 30 - Exam Week)

Examinations Group Project

Weightings

There are ten courses, each worth 0.3 of a course unit and the Group Project is worth 1 course unit. In order to gain a pass in Management year, students are required to achieve a satisfactory performance in at least 3.0 course units overall.

1	Accounting
2	Business Strategy
3	Entrepreneurship
4	Health Economics
5	Health Service Research
6	Information Systems in Health Care
7	Managing Health Care Organisations
8	Marketing
9	Organisational Behaviour & HRM
10	Project Management
11	Group Project

Programme Assessment

Each subject is assessed on the basis of a final examination and coursework (excluding the Group Project which will be assessed by a presentation and report).

You will be given access to 3 years' worth of past exam papers for each subject with the exception of multiple choice question exam papers in the subjects of Business Economics and Finance and Financial Management. Examples of multiple choice questions will be given separately by the lecturer of the course.

Formal Examinations – These dates may be subject to change

Autumn Term Examinations dates week commencing Monday 11 January 2010. Please note these dates are subject to change

Accounting
Business Strategy
Health Service Research (N/A)
Information Systems in Healthcare
Organisational Behaviour & Human Resource Management

Spring Term Examinations dates week commencing Monday 26 April 2009. Please note these are still to be confirmed.

Entrepreneurship
Health Economics
Managing Health Care Organisations
Marketing
Project Management

The objective of the BSc in Medical sciences with Management is to equip future clinicians with an understanding of the management issues facing the health system and to provide them with some basic management skills and tools.

BS0601 - ACCOUNTING

COURSE AIMS

The aim of this course is to develop certain accounting related skills, by explaining the techniques of financial accounting and management accounting, and examining their relevance to the broader issues of financial decision-making and management control in organisations. The course gives students a basic insight into the way that business performance is measured, and how business decisions can be structured and analysed.

KNOWLEDGE OBJECTIVES

This is an introductory course. Students are expected to develop a basic, but not detailed knowledge of:

- Balance sheets and profit & loss accounts
- The valuation of assets and liabilities
- Financial ratios and how these can be used to analyse performance of the company as a whole
- Cash flow statements
- Cost concepts and costing systems
- Analytical techniques available for economic decisions in business enterprises and other informational requirements
- Budgeting and performance measurement at the operational level

SKILL OBJECTIVES

The course will facilitate the student development of:

- Interpretative skills in relation to accounting information including a critical attitude to its value and limitations
- Computational and analytical skills in relation to the use of accounting data to facilitate
 decisions concerning the operation of, and investment in, production systems, and the
 design and production of products or services

LEARNING OUTCOMES

By the end of the course student will be able to:

- Identify the major issues raised by financial and costing accounting data
- Take an effective involvement in business operations

TEACHING METHODS

Teaching is by lectures and tutorials, and will encourage student participation.

ASSESSMENT

- One multiple-choice test (after Part A 15%)
- One written assignment (after Part B 15%)
- An examination of 2 hours duration (70%)

MAIN RECOMMENDED TEXTS

Glautier, M.W.E. & Underdown, B., **Accounting Theory & Practice**. Financial Times Prentice Hall, Seventh Edition, 2001.

Pendlebury M. & Groves R., Company Accounts: Analysis, Interpretation & Understanding. Thomson Learning EMEA, Sixth Edition, 2003.

Another text (or rather a pair of authors*) is: McLaney, E. and Atrill, P., **Accounting: An introduction.** Financial Times, Prentice Hall, Fourth Edition, 2008. [*These authors have produced many accounting texts – with slightly differing titles – they are each highly recommended.]

COURSE OUTLINE

The course is structured in two parts:

Part A - Financial Accounting

Part B - Management Accounting

Accounting, costing, and financial issues are addressed with varying degrees of emphasis throughout the course.

Part A - Financial Accounting

- The nature and roles of financial accounting
- The balance sheet
- Equity and trading
- Profit determination
- Stock valuation
- Provisions and valuation of fixed assets
- The cash flow statement
- Types of ratios
- Ratio analysis and further analysis of accounts

Part B - Management Accounting

- The nature and roles of management accounting
- Basic cost concepts
- Cost accounting systems
- Short-run decision making
- Investment decisions
- Budgetary control
- Performance evaluation

BS0603 - BUSINESS STRATEGY

COURSE AIMS

Strategy is the art of creating value. The ultimate objective is to attain or maintain a competitive advantage in a market or markets. Success stories abound. AirAsia, Cirque du Soleil, HSBC, Nestlé and Samsung have each been acclaimed in recent years as triumphant products of the strategic imagination. Yet for every example of strategic success, it is possible to trade an equally spectacular example of strategic failure. We only have to think of Enron, ABB, WorldCom, Marconi, Cable & Wireless, Vivendi Universal and any number of Japanese banks to witness the potentially destructive power of wrong-headed strategies. The fact is that strategy is a double-edged sword: it can be the source of power and wealth but equally the cause of disaster. It is therefore essential that any existing or aspiring strategic leader understand the nature and purpose of strategic management.

Strategy is about a sense of organizational purpose and direction, together with a means for achieving this purposeful direction. The aim of the *Business Strategy* course is to place the student in an arena of strategic choices and decisions experienced by the senior management team of a company. Enduring market success hinges upon having a viable and flexible strategic management process. This course aims to construct a strategic management agenda that considers alternative approaches to strategy formulation in complex and uncertain environments, examines the context within which strategy is made and implemented and assesses options and challenges that regularly confront the business enterprise.

LEARNING OBJECTIVES

By the end of the course you should be able to:

- Understand and describe the key strategic issues facing senior management teams and the key analytical concepts applicable to each.
- Evaluate an organisation's current strategic position, its business environment and its future strategic options, using analytical concepts appropriate to the organisation's situation.
- Make and defend recommendations as to the choice of a given organisation's future strategy and its implementation.

TEACHING METHOD

The course will be delivered through two, two-hour integrated lecture/workshop sessions. The workshop will involve the discussion and analysis of case studies related to the lecture theme. *Students are expected to have read the relevant case in advance of each session.* The related academic readings are supplementary and although I strongly suggest you read these as we proceed; they are mainly included for exam preparation purposes. Students are also expected to be active participants in classroom discussions. Questions alone are not considered participation, nor is merely coming to class and listening to the discussion. You are expected to know the facts as stated in cases and readings and offer meaningful analysis and convincing arguments for positions taken. Students are generally divided into teams for case work and may be expected to give pre-planned presentations on a regular basis.

ASSESSMENT

The course assessment will consist of a written examination (70%) in the Spring term and a team-based report to be submitted at the end of the Autumn term (30%). The written group report should be 4000 words in length

GROUP REPORT - INSTRUCTIONS

(30% of total course assessment mark)

Overview

A new CEO has been appointed to lead your chosen organisation. The new Chief Executive is seen by the board as the person to undertake a 'strategic rethink, regroup and repositioning'. Head-hunted from a successful global company, the new boss is devoid of any organisational baggage and has the full support of the board and the major shareholders.

Instructions

Assume the guise of an external strategic management consultancy team, hired by the new CEO to advise her/him on the nature of the company and industry and the best course of action to pursue. You should:

- (a) Conduct PEST, SWOT, Strategic Group and Five Forces analyses.
- (b) Using other concepts and tools that you acquired or developed in the Business Strategy course, construct a strategic plan for the new CEO and indicate how this may be effectively implemented.
- (c) The plan should detail objectives / targets, have a timeline and give broad indication of financial requirements

General parameters

Companies may be drawn from any business sector or country of origin but must be agreed in advance by Colin Love. Companies selected should have a minimum consolidated turnover of \$100 million

The assignment will be judged primarily on *content* (argument, analysis, evidence); *delivery* (layout style and research effort); and *creativity* (innovation and imagination). Original material, thought and construct will be particularly welcomed.

Assignment Submission

The submission has two elements:

- 1. **The report:** Your report addressing the points above from your consultancy should be a maximum of **4000 words** including appendices, together with a word count.
- 2. Promotional Video: As a response to the report, the new CEO will produce a 10 minute video presenting his new strategic vision for the future. This will be released to major TV channels, 'City' institutions, analysts and major shareholders. One of your team should feature in the video. The video presentation should be posted to YouTube and a hard copy put on CD and delivered to Catherine Fison, the course administrator. The presenter will not be awarded additional marks. The video is a team effort.

TEXTBOOKS AND OTHER REFERENCES

Students are encouraged to supplement the course readings with other literature sources (please refer to suggested sources below for more information).

Recommended Texts

If you want a general textbook on strategic management, I would recommend one of the following:

- Johnson, Gerry, Scholes, Kevan and Richard Whittington (2007) Exploring Corporate Strategy, 8th edition, London: FT Prentice Hall (previous editions are fine too). This edition has the benefit of web based learning material
- Thompson, Strickland, Gamble 2008 Crafting and Executing Strategy McGraw Hill
- McGee, Thomas, Wilson 2008 Strategy Analysis and Practice McGraw Hill
- Barney, Hesterly 2008 Strategic management and Competitive Advantage
- Lynch, Richard (2006) Corporate Strategy, London: FT Prentice Hall.
- White, Colin (2004) Strategic Management, Basingstoke: Palgrave Macmillan.

For state-of-the-art strategy cases and concepts:

- Sydney Finkelstein, Charles Harvey and Thomas Lawton (2007) *Breakout Strategy:* meeting the challenge of double-digit growth, New York: McGraw-Hill.
- * Any of the above is acceptable. Please note that none are compulsory purchase.

Read on a regular basis – The Times, FT, Economist

BS0606 - ENTREPRENEURSHIP

INTRODUCTION

Entrepreneurship requires a "will" and a "vision" to establish a new business and exploit new opportunities. The "will" characterizes the entrepreneur is a distinct personality. The "vision" implies that the start-up and growth process is not entirely "ad random" but involves a high degree of planning, knowledge and initiative. In this course, students are taught basic entrepreneurial skills such as creativity and problem solving skills, financial planning skills, marketing and market forecast and, finally, valuation.

COURSE AIM

The aim of this course is to (i) demystify the entrepreneur and (ii) guide students through the 'exciting nightmare' of taking an idea or a technology to market, growing the venture and

securing a successful exit. The course is grounded in rigorous academic theory but the focus is highly practical and class participation is highly encouraged.

LEARNING OUTCOMES

On completion of the course, the student will be able to:

- Evaluate the viability of a high-potential new venture.
- Produce and present a business plan for a new venture.
- Understand the theoretical foundations of entrepreneurship.
- Analyse a new or growing venture from the perspective of an investor, a familybusiness successor, or an owner-manager.
- Understand venture capital finance

COURSE STRUCTURE - SYLLABUS

The course comprises ten two-hour sessions.

1. Introduction

- a) Introduction to the module, learning objectives and assessment
- b) Definition of entrepreneurship
- c) Overview of the degree of entrepreneurial initiative in different countries/regions
- d) Exercise: How entrepreneurial are you?

2. Innovation and Entrepreneurship: Detecting Opportunities

- a) Types of Innovation
- b) Industry Cycle
- c) Technology Standards and S-curves
- d) Market Needs

3. Creativity

- a) Identifying opportunities
- b) The 6-stage creativity framework
 - a. Problem Definition
 - b. Root Causes
 - c. Idea Synthesis
 - d. Idea Generation
 - e. Idea Selection
 - f. Implementation
- c) Defining a Value Proposition

4. Appropriability

- a) Appropriability and Freedom to Operate
- b) Patents, Trade Marks and Copy rights
- c) Developing a protection strategy
- d) Exercise: determine the freedom to operate of a given example

5. Value Chain, Network and Complementary Assets

- a) The concept of a "value chain"
- b) Value networks as additional challenges
- c) The Teece framework
- d) Exercise : evaluate the commercial potential of a number of different value propositions

6. Market Size and Market Approach

- a) Estimate market size
- b) Determine go to market strategies
- c) Assess product/market segmentation
- d) Bottom up vs. top down approaches

7. Teams

- a) What are ideal teams?
- b) How to formulate a recruitment strategy
- c) How to assess teams?

Guest presentation: How did my business improve in a team related environment?

8. Financial Plan

- a) Components of a financial plan
- b) Use of a template
- c) Exercise: learn how to work with a template

9. Sources of Finance and Valuation

- a) Financial strategy
- b) Sources of finance
 - a. Business angels
 - b. Corporate finance
 - c. Venture capital
- c) Valuation
 - a. NPV
 - b. P/S and P/E
 - c. Logic Valuation

10. Presentations

Present your business plan

RECOMMENDED TEXTS (see also above)

Supporting documents IED

ASSESSMENT

Assessment will be based on group coursework (40%) and an exam (60%), which will be taken at the end of the course. Students will be expected to prove detailed knowledge of the course material.

EXAM (60%):

In the exam, you have to answer **three** out of six questions. All questions carry equal marks.

Group Coursework (40%): Each group will be assessed on a 10 minute presentation (max 10 slides, including the introductory slide) **plus** a 1500 word executive summary on the business plan.

All group members need to attend the presentation.

A possible structure of the business plan is as follows:

- The Product/Service
- Analysis of the Market & Competition
- Marketing
- The Team
- Business Model
- Implementation schedule
- Financials

BS0500 - GROUP PROJECT

All students will contribute to a group project. Typically the groups will consist of 6 students. Each group will be supervised by a School faculty member - not necessarily one who is involved in the formal teaching of the programme. The project occupies part of the Spring term and the whole of the Summer term, culminating in a group presentation and submission of report in May/June TBC.

PROJECT OBJECTIVES

The objectives of the different projects may vary, but are likely to include:

- an application of management techniques, principles or concepts to the analysis of a specific problem arising in some health care organisation or
- analysis of a particular health related industry or aspect of the economy or
- further development of a generalised technique or model or
- a deeper understanding and explanation of the literature relating to a
 pertinent area of health care management,
- experience of working in a team

TEACHING METHOD

- 1. Students will be assigned to groups and will be asked to start considering what they would like to do for their project in the Autumn term. The project will either be one proposed by a member of staff, or one devised by the student group.
- 2. All student groups must submit a one-page description of their proposed project, intended methodology etc. This is to be submitted electronically via Blackboard at the beginning of the second term TBC for approval. Groups will then be assigned a member of staff to supervise them.
- 3. During the autumn term groups prepare a detailed project protocol, which is assessed as part of the Health Research Methods course. If necessary, groups will prepare an application for ethical approval during this term. (note that this can be a protracted process)
- 4. Students start to work full-time on their projects after the exams in the summer term. Over a period of four or five weeks, they work intensively conducting a literature review, collecting and analysing data, and preparing a presentation and written report.
- 5. Presentations will take place in May/June TBC. **Students must attend all presentations as part of the assessment.** The presentation will be assessed.
- 6. The final report (25,000 words in length) will be submitted immediately after the presentation for assessment. The groups should provide a statement of their effectiveness as a group. Care should be taken to achieve consistency in presentation.

ASSESSMENT

The assessment of the group project is by group presentation and group report. The final report will be assessed by the supervisor and another member of staff, and a mark agreed. It is essential that each member of the group contributes equally. During the previous years of the programme, the importance of working together as a team has been constantly emphasised. This final test should demonstrate this!

BS0506 - HEALTH ECONOMICS

AIMS

To analyse principles of microeconomics and their application to health care To examine issues of efficiency and equity and their application to health care

Knowledge Objectives

To give students an understanding of:

- Markets and market failures in health care
- Uncertainty and the operation of health insurance markets
- The agency relationship and the possibility of supplier induced demand
- Reasons for caring about the health of other people
- How spending on health care compares across countries
- The nature of the demand for health
- Different methods of financing and providing health care
- Methods of reimbursement in health care and the incentives they provide
- How to measure and value the benefits of health care
- Issues in the rationing of health care

Skill Objectives

Through the module students should develop the ability to:

- Apply the key tools of microeconomics to health care
- Comment knowledgeably from an economics perspective on health policy
- Critically appraise economic evaluations of health care technologies

Learning Outcomes

On successful completion of the module students will be able to:

- Understand how markets work in theory and how the assumptions of a perfect market are often violated in health care
- Explain how health insurance markets operate
- Understand the nature of the doctor-patient agency relationship
- Understand the factors that explain differences in health care expenditure
- Explain how the demand for health care is derived from the demand from health
- Understand the pros and cons of different methods of financing health care
- Understand how different remuneration schemes may operate
- Define different types of economic evaluation and identify the situations in which they can be used
- Discuss how the results of economic evaluations can be used to inform resourceallocation decisions
- List the factors besides cost-effectiveness that are important determinants of how to allocate scarce health care resources

TEACHING METHODS

Each session will comprise a lecture and class discussion

COURSE OUTLINE

1	Introduction to markets and market failures in health
2	Uncertainty and health insurance
3	The agency relationship and supplier induced demand
4	Equity and concerns for other people
5	International comparisons of health care spending

6	The demand for health and health care
7	The public/private mix in health care finance
8	Financing and reimbursement of providers
9	The economic evaluation of health interventions
10	Economic evaluation and priority setting

ASSESSMENT

The course will be assessed by a written assignment (30%) and exam (70%)

READING

There is no core text as such but the following covers a lot of material on the course:

Dolan P and Olsen JA, Distributing health care: economic and ethical issues, Oxford University Press, 2002.

1. Introduction to markets and market failures in health

Culyer AJ and Evans RG, 1996, Mark Pauly on welfare economics: normative rabbits from positive hats, Journal of Health Economics, 15, 243-251.

Dolan and Olsen, 27-30; 49-53

2. Uncertainty and health insurance

Arrow KJ, 1963, Uncertainty and the welfare economics of medical care, American Economic Review, 53, 941-973.

Dolan and Olsen, 53-60

3. The agency relationship and supplier induced demand

Dolan and Olsen, 60-66

Labelle R, Stoddart G and Rice T, 1994, A re-examination of the meaning and importance of supplier-induced demand, *Journal of Health Economics*, 13, 247-368 (with comment by Pauly)

Reinhart U, 1985, *The theory of physician-induced demand: reflections after a decade*, Journal of Health Economics, 4, 187-193.

4. Equity and concerns for other people

Dolan and Olsen, 32-38; 72-81

Le Grand J, 1991, Equity and choice, Harper Collins, London (chs. 5-7).

5. International comparisons of health care spending

Gerdtham U-G and Jonsson B (2000) 'International comparisons of health expenditure theory, data and econometric analysis' Ch 1 in Culyer AJ & Newhouse JP *Handbook of Health Economics*, Elsevier.

Newhouse, Joseph P. "Medical care expenditure a cross-national survey." *Journal of Human Resources*, 1977, *12* 115-125.

6. The demand for health and health care

Grossman M (2000) 'The human capital Model' Ch 7 in Culyer AJ & Newhouse JP *Handbook of Health Economics*, Elsevier.

Grossman M (1972) 'On the concept of health capital and the demand for health' *Journal of Political Economy* 80(2) 223-255

7. The public/private mix in health care finance

Dolan and Olsen, 82-92

Oliver A, Mossialos E, Maynard A. The contestable nature of health policy analysis. *Health Economics*, 2005, 14: Supplement (S1), 3-6.

Oliver A. **The English National Health Service: 1979-2005,** *Health Economics*, 2005, 14: Supplement (S1), 75-S99.

8. Financing and reimbursement of providers

Dolan and Olsen, 92-97

Jegers, Marc, Katrien Kesteloot, Diana De Graeve and Willem Gilles: A typology for provider payment systems in health care, 2002. *Health Policy*, 60 (3):255-273.

9. The economic evaluation of health interventions

Dolan and Olsen, 98-112

Drummond MF, O'Brien B, Stoddart GL and Torrance GW, Methods for the economic evaluation of health care programmes, *Oxford Medical Publications*, 1998, Chs 2 & 3

10. Economic evaluation and priority setting

Dolan and Olsen, Ch 121-128

Dolan P, Shaw R, Tsuchiya A and Williams A, 2005, QALY maximisation and people's preferences: A methodological review of the literature, *Health Economics*. 14, 2, 197-208

BS0507 HEALTH SERVICES RESEARCH

COURSE AIMS

The aim of this course is to provide students with:

- 1. An introduction to the aims and principles of Research Methods;
- 2. An appreciation of a number of different methodologies
- 3. Coverage of key quantitative and qualitative methods:
- 4. The ability to apply these methods to a real life problem through a project.

COURSE OBJECTIVES

Knowledge

This is an introductory course, which aims to cover the *methodological issues* involved in conducting research into management issues. Students are expected to develop a basic but not detailed knowledge of various approaches to research and to be able to apply this knowledge to real life problems. Research Methods covers a wide spread of research techniques, including those based on the social sciences which may not be familiar to management and science students. More specifically, students should develop a basic understanding of the following areas:

- Research Methods as applied to health management;
- Methods for reviewing the existing literature;
- Basic principles of study design;
- Sampling techniques and questionnaire surveys;
- Quantitative methods and analysis;

- Qualitative methods and analysis; and
- How to evaluate social science research as applied to health management.

Skills

- Communication skills: oral skills will be developed in class discussion; written skills through a coursework assignment;
- Critical reasoning skills will be developed in class discussion and through a written assignment;
- Problem solving and decision making skills will be developed through class exercises;
- Negotiation and team-working skills will be developed through the participation in a group project, group discussions and group work in class;
- Research methodological will be practiced through the development of the group project proposal which should apply some of the methodological guidance covered in the course and literature in a practical fieldwork setting.

STRUCTURE, FORMAT AND TEACHING

20 hour course (10 x 2 hour sessions) in the first five weeks of the autumn term (2 sessions per week).

For each session, there will be a lecture supported by group discussion around particular studies and methods to ensure an element of interaction and participation. Students will also work in a self-directed manner individually or in small groups to prepare project proposals. Case studies will be used to illustrate research issues, and exercises will be used to develop students' capacity for the application of their knowledge into practice. The preparation of a protocol (project outline) for a primary research project is used to stimulate 'learning by doing'. Because this is an interactive group-supported course, students are expected to attend every session and do preparatory reading as required.

LEARNING OUTCOMES

By the end of the course, the students will be able to:

- understand the basic features of Health Services Research as a multi-disciplinary field;
- understand basic principles of social science research as well as natural science research
- appreciate the range of qualitative and quantitative research designs;
- appraise critically the quality of studies against appropriate methodological criteria; and
- apply these principles in a small scale research exercise.

ASSESSMENT

Assessment will be through two pieces of coursework.

- (a) Group work: The research protocol will contribute 50 per cent of your overall course mark. It needs to be submitted for the Group Project that you will be undertaking in the summer term. This coursework has to be submitted via Blackboard by **December**. The content of the protocol will consist of the following major headings:
 - Introduction and Background
 - Aims and Objectives
 - Methods
 - Plans for dissemination and feedback
 - Timetable
 - List of report chapters and subheadings
 - References
- (b) Individual work: a literature review will form the other 50 per cent of the course assessment. It should not exceed 2,000 words (excluding references and appendices) and is

an opportunity to demonstrate your understanding of the concepts and principles of HSR. This coursework has to be submitted via Blackboard by **January.**

You need to develop a literature review title and question around one of the following topic areas:

- Organisational change management
- Knowledge management
- Adopting innovations in health care technology/service delivery
- Evidence based practice
- Managerial issues in health care
- Health care and consumerism

COURSE STRUCTURE

Session 1: Introduction (Dr Jane Hendy & Dr Marisa Miraldo)

This session introduces to the course and the importance of learning research methods. We will discuss your role in the course process and your personal goals and objectives.

The session introduces the group project (e.g. the project timetable, requirements for the conduct of the project and writing up the report). The session also introduces the purpose of the research protocol, including how to design a good protocol (e.g. introduction and background, review of existing literature, aims and objectives of the study, intended methods of research, plans for dissemination, timetable and milestones).

Session 2: Literature Review (Dr Jane Hendy)

This session focuses on how to construct a literature review question, the value of critical appraisal and synthesis in writing up the literature. It also discusses how to conduct a literature search: an overview of methods for accessing, selecting and reviewing the literature; the importance of literature review for topic selection and study design.

Session 3: Skills for Literature Search (Heather Loveridge, Imperial College Library)

Skills for searching the literature: systematic methods of literature searching, including an introduction to medical and management databases.

Session 4: Basic Principles of Study Design (Dr Steffen Bayer)

The session discusses case study design and other forms of social science study design. It also introduces how to evaluate strengths and weaknesses different study design.

Session 5: Sampling and Survey Methods (Dr Marisa Miraldo)

This session covers the following topics: issues of sampling; response rates; surveys and questionnaires; questionnaire design and administration; preparation of data for coding and analysis.

Sessions 6 and 7: Quantitative Methods and Analysis (Dr Marisa Miraldo)

This double session offers insights into the way in which collected data can be treated by using data sets.

Session 8: Qualitative Research part 1 (Dr Jane Hendy & Dr. Paul White)

This session will discuss qualitative sampling procedures and data collection techniques, including interviews, focus groups, ethnography and observation data collection techniques, with illustrative examples introduced.

Session 9: Qualitative Research part 2 (Dr Jane Hendy and Dr Theti Chrysanthaki) This session discusses qualitative analysis, including narrative approaches, thematic analysis and ground theory. The session will also discuss ways of evaluating the quality of qualitative research studies, with illustrative examples introduced.

Session 10: How to Evaluate Social Sciences as Applied to Health Management (Dr Jane Hendy)

This session identifies issues in health services research. We will also discuss a published journal article and have an interactive presentation session. These skills will be directly applicable to your group project.

Question and answer session regarding the group project.

REFERENCES

Core Texts

Bowling, A. (2002) *Research Methods in Health'* 2nd edition, Buckingham: Open University Press.

Fulop, N. et al (2001) *Studying the Organisation and Delivery of Health Services*, London: Routledge.

Saunders, M. Lewis, P. and Thornhill, A. (2003) Research Methods for Business Students, Essex: FT/Prentice Hall, Pearson.

Additional Reading

Blalock, A. B. and Blalock, H. M. (1982) *Introducing Social Research*, NJ: Prentice Hall. Blalock, H. M. (1970) *Social Statistics*, London: McGraw-Hill.

Bryman, A. and Bell, E. (2003) *Business Research Methods*, Oxford: Oxford University Press

Bie Nio Ong (1993) 'The Practice of Health Services Research', London: Chapman and Hall De Vaus, D. A. (1986) Surveys in Social Research, London: Allen and Unwin.

Murphy, E. et al (1998) 'Qualitative Research Methods in Health Technology Assessment – A Review of the Literature', University of Southampton: NCCHTA, Health Technology Assessment, 2(16).

Oakley, A. (2000) Experiments in Knowing, Cambridge: Polity Press

Ovretveit, J. (1998) Evaluating Health Interventions, Buckingham: Open University Press Yin, R. K. (2002) Case Study Research, Design and Methods, 3rd ed. Newbury Park: Sage.

BS0509 INFORMATION SYSTEMS IN HEALTHCARE

COURSE AIMS

The management of information systems is becoming increasingly critical to the practice of health care. This course aims to introduce the principles of effective information systems management.

COURSE OBJECTIVES

Knowledge Objectives

Students will gain knowledge of:

- the role of information and information systems in healthcare
- how traditional management practices can be applied to healthcare information systems projects
- pertinent healthcare applications and
- a vision of the future

Skills Objectives

Students will have the skill to be able to:

- formulate an information systems strategy
- manage the implementation of an information systems project
- make information systems investment decisions

Learning Objectives

Students will have the ability to:

apply generic management principles to effectively manage healthcare systems

STRUCTURE

20 hours duration

TEACHING METHODS

The delivery of the course will be through lectures, invited talks by guest speakers, videos and computer assisted learning.

ASSESSMENT

The course will be assessed through a written examination (weighting 70%) and a compulsory coursework assignment (30%).

READING LIST

There is no one recommended course textbook because, in my view, there is nothing that covers the area completely and satisfactorily. The course syllabus is defined by the handouts and the lecture notes. However, the list below pinpoints some directly relevant reference material. If you would like some further reading I would be delighted to offer some more suggestions.

Essential

Turban, E., D. Leidner, E. McLean and J. Wetherbe Information Technology for Management: Transforming Organizations in the Digital Economy (Hoboken, NJ: Wiley, c.2008) sixth edition [ISBN 9780471729].

Recommended Reading

Coiera, E. Guide to Health Informatics, Arnold, 2003

De Dombal, F.T. Medical Informatics, the Essentials, Reed Educational & Professional Publishers, 1996.

Hannah, K.J. & Ball, M.J. Introduction to Clinical Informatics, Springer-Verlag, New York, 1997.

Haux, R. Strategic information management in hospitals: an introduction to hospital information systems, Springer, 2004

Taylor, P. From Patient Data to Medical Knowledge, The Principles and Practice of Health Informatics, Blackwell Publishing, 2006

Van Bemmel, J.H. & Musen M.A. Handbook of Medical Informatics, Springer, 1997.

BS0510 MANAGING HEALTH CARE ORGANISATIONS

COURSE AIMS

To equip participants with the skills and the functional tools to work effectively in health care organisations and to highlight examples of best practice.

COURSE OBJECTIVES

Knowledge Objectives

Key concepts and future trends in

- services operations
- · demand management
- quality structures
- inventory control
- value chain application
- decision making techniques
- communications channels
- negotiation approaches

set against a historical perspective on the development of the National Health Service.

Skills Objectives

- Communications skills: aural, oral and written
- · Team working through class and syndicate discussions
- The application of knowledge in practical contexts

Learning Objectives

Students who complete the course successfully will be able to

- explain the issues of demand management in healthcare
- describe and evaluate quality initiatives in the delivery of health care
- identify good practice in service delivery and inventory management in a healthcare setting
- approach negotiations with greater confidence
- manage basic media interactions
- understand how the original NHS vision has evolved into today's service

TEACHING METHODS

The module is designed to be practical in its intent and will draw on examples from healthcare and other industries to demonstrate the practical implementation of concepts that will be covered through lectures, case studies, class discussion and practical exercises.

ASSESSMENT

- Closed book examination (70%)
- Course work: Group activity (30%)

The exam paper will be in two parts. You will be asked to answer 1 question in Part A from a choice of 2 and 1 question in part B, from a choice of 3. Part A and Part B carry equal marks. Higher marks will be awarded if answers are focused on the specific question asked, argue the case well and draw on material discussed in class and from the suggested readings to support those arguments. Students will be heavily penalised if their answers do not specifically address the question asked.

BS0611 - MARKETING

COURSE AIMS

More often than not companies and organisations spend great resources developing and marketing new products/services only to discover that consumer response is far less ecstatic than expected. Effective business marketing requires a clear understanding of consumers and the market in general. The primary aim of this course is to help students understand how marketing contributes to a firm's competitiveness and survival. Second, the course is designed to provide students with critical marketing insights, tools, and techniques.

Throughout the course students will gain an understanding of the contingent conditions under which various marketing techniques work most effectively. The course will also introduce a number of new marketing concepts associated with brand management, promotion, and services marketing. Short case studies during lectures underscore the critical value of marketing strategies in creating successful and profitable customer relationships. Findings from current research will be part of and examined throughout the lectures.

COURSE OBJECTIVES

Knowledge Objectives: The main knowledge objectives of the course are to help students understand:

- Marketing's role in creating value for consumers and organisations
- How marketing contributes to a firm's competitiveness and survival
- How marketing strategies are developed and implemented in embryonic, growing, and mature markets
- How marketing strategies can be augmented over time

Skill Objectives: The main skill objectives of the course are to enable students to develop:

- Diagnostic and analytical skills to critically analyse current business practices
- Skills in defining problems and examining market opportunities in the context of different consumer markets
- Technical skills to assess strategies that provide customer value and that result in sustainable competitive advantage for organisations.

LEARNING OBJECTIVES

The course will help students to:

- Understand contingent conditions under which various marketing techniques work
- Evaluate the success of product and service strategies based on their understanding of consumer behaviour, pricing, and distribution
- Critically examine the development of new business opportunities including brand extension strategies
- Manage the optimal mix of marketing strategies needed to create superior value for consumers and business organisations

STRUCTURE

The course will consist of 10 x 2 hour lectures. In each lecture, we examine business cases involving new and existing products/services in a range of markets.

COURSE OUTLINE

Session One: The marketing concept and its evolution

What is marketing and why is it important to firms? Marketing strategy: the marketing concept, market orientation. Stages of marketing evolution. Marketing plan content. Marketing mix decisions. Understanding customers' definition of value. Creating customer value.

Session Two: Consumer buying behaviour

Understanding and targeting customers. Segmentation: how to identify segments of customers within markets. Targeting: identifying segments to target. Positioning: achieving a superior position in the minds of customers relative to competitors.

Session Three: Marketing channels

The nature of marketing channels. Choosing distribution channels to enhance customer value. Distribution as product/service differentiator. The management of marketing channels.

Session Four: Pricing strategies and product life cycle

Price and non-price competition. Factors affecting pricing decisions. Analysis of demand, cost and profit relationships. Selection of strategic base for pricing. The product life cycle: its stages and determinants. Managing demand, the product mix and the marketing mix over the life cycle.

Session Five: Marketing communication strategies

Communication processes. Steps in developing marketing communications. Alternative types of advertising. The role of promotion and promotional mix: promotion strategies and techniques. Assessing advertising effectiveness.

Session Six: Relationship marketing

Relationship marketing logic. Recognising the costs of customer defections. Why loyal customers are more profitable over time. Building customer loyalty. Symptoms of customer disregard. Customer relationship opportunities.

Session Seven: Brand management

Strategic benefits of branding. Brand attachment: what is the value in brand attachment? Brand equity leveraging strategies. Brand fortification strategies: how superior value can be managed for both firms and consumers.

Session Eight: Branding decisions and marketing in information economy

Branding decisions: factors to be considered. Network effects and positive feedback in information economies. Marketing strategies for markets with strong network effects. Innovation and change. Marketing and the internet. E-marketing strategies.

Session Nine: Services marketing

Challenges faced by service marketers. The services marketing triangle. Additional elements of the marketing mix. The market-focused mind set for service providers. The cycle of failure. Service quality. Dimensions of service quality.

Session Ten: Managing Innovation Culture

How does marketing relate to innovation? What is innovation? Who innovates? Who benefits from innovation? What is an innovation culture and how can it be managed? Current research findings will be examined.

TEACHING METHODS

- Lectures will expose students to crucial analytical tools and marketing techniques
- Current research findings are integrated throughout the lectures to expose students to research and business advances in the field of marketing
- Case study discussions during lectures will allow students apply their knowledge to a range of business scenarios

ASSESSMENT

Your grade for the course will be made up as follows:

Final Examination 70% Group Assignment 30%

Group Assignment

You are expected to work in syndicate groups. Each member of the group gets the same mark as other members of the group. The brief for the group assignment follows and will be discussed in detail during our lectures. The mark awarded is for the way you address the brief in the form of a group presentation (a maximum of 10 minutes by PowerPoint with slide

copies) given to the class during the last one/two sessions. Order of presentation will be by group preferences.

Brief for Group Assignment

Select a product or service that has been in existence for the last five years. Consider (some) of the following issues:

- What was the market gap that the product sought to fill?
- Describe the launch strategy using the marketing mix.
- In what way could the launch strategy be improved?
- How did competitors respond?
- How did the firm employ the marketing mix to create superior value to customers?

You are reminded that marks are awarded for analysis rather than description.

Syndicate groups should confirm to me by Email, group members, names, and product/service choice for the assignment.

Reading

The lecture notes are the main reading for this course. Additional material will be posted on WebCT (the study of the additional material, however, is *optional*).

Optional Textbooks

- Dibb, Sally, Lyndon Simkin, William Pride and O.C. Ferrell (2006), *Marketing Concepts and Strategies*. Boston, MA: Houghton Mifflin (ISBN: 0-618-53203).
- Kotler, Philip and Kevin Lane Keller (2006), Marketing Management (International Edition).
 Twelfth Edition, Prentice-Hall International (ISBN: 0-13-145757-8).

Business Cases

Short video clips will be shown during lectures to illustrate current business practices by a series of firms and brands. We will discuss how marketing strategies and techniques can be implemented in the most effective way.

BS0612 - ORGANIZATIONAL BEHAVIOUR & HUMAN RESOURCE MANAGEMENT

COURSE AIMS

This course introduces students to the field of Organization Theory that enhances their understanding of how organizations can be managed effectively in a rapidly changing environment. The course focuses on two aspects of managing organizations. First, it sheds light on how an organization's goals, strategies, structure, technology and external environment relate to each other and that this relationship is critical to the performance and effectiveness of an organization. Second, it emphasizes the challenges managers face in managing internal dynamic processes in an organization including the role of culture, managing change, decision making processes and human resource management processes. These processes have a significant impact on organizational performance.

COURSE OBJECTIVE

(I) Knowledge

Students will be able to draw on concepts from Organization Theory to explore the nature of organizations today and to understand and diagnose organizational needs and problems that emerge as organizations strive to stay competitive in a rapidly changing context. More specifically, students will develop an understanding of the following:

 How organizations can be designed and structured to function effectively in an increasingly volatile and unpredictable external environment Recognizing the importance and challenges of managing internal organizational dynamics emerging from culture, processes of change, decision making, inter-group and intra-group conflict, power and politics

(II) Skills

The course will enhance students' ability to:

- Apply theoretical concepts to real life organizational scenarios through the use of case studies in class
- Develop analytical skills in identifying, diagnosing and evaluating key organizational issues

LEARNING OUTCOMES

On the completion of this course, students will have developed an understanding of:

- How organizations operate as open systems
- The contingent factors influencing organization structure and design
- Internal dynamic processes in an organization that are critical in reinforcing organization strategies and structure
- Organization Theory in action as students will be able apply theoretical concepts to real life organizational scenarios

TEACHING METHODS

The teaching method in this course involves a combination of lectures and analyses of cases encouraging active class participation.

ASSESSMENT

The assessment comprises two parts:

- Multiple Choice Exam 30%
- Examination 70%

SCHEDULE

Week 7a Introduction to the course

Historical background of organization theory Video: Modern Times by Charlie Chaplin

Week 7b The external environment and organization structure

Readings: What makes Pepsi great?

Week 8a Organization goals, strategy, and organization structure

Case: Wal-mart

Reading: Hambrick, D. & Fredrickson, J. 2001. Are you sure you have a

strategy? Academy of Management Executive, 15(4): 48-59

Week 8b Technology (work processes) and designing organization structure

Week 9a Organization structure alternatives

Case: Sony chases Apple magic?

Case: Oticon

Reading: Waterman, R., Peters, T., & Phillips, J. 1980. Structure is not

organization. Business Horizons, June 1980: 14-26

Week 9b Organizational culture

Video: Tom Peters

Week 10a Decision-making processes

Video: The Challenger Disaster

Week 10b Managing organizational change

Reading: Nadler, D. & Tushman, M. 1989. Organizational frame bending: Principles for managing reorientation. Academy of Management Executive,

3(3): 194-204

Reading: Kotter, J. 1995. Why transformation efforts fail?. Harvard Business

Review, Mar-Apr:

Case: The mystery of the performance difference

Week 11a Organizational structure and HRM processes

Week 11b Multiple choice test

TEXTS

Core text: Daft R.L. Organization Theory and Design, 8thEdition, Thomson, 2004 **Other recommended texts:**

Mullins L.J. Management and Organizational Behaviour, 7th Edition, Prentice Hall Morgan, G. Images of Organization, Sage 1997, 2nd Edition Jones. Organization Theory, Design and Change 5th Edition

BS0617 - PROJECT MANAGEMENT

COURSE AIMS

This course provides students with an understanding of project management and its central role in the modern business enterprise. It aims to show how project management is used to:

- drive innovation in products, processes, systems and services
- organise the activities of the firm and its network of suppliers or clients
- promote organisational learning
- achieve business strategy objectives
- facilitate corporate *entrepreneurship* activities through project ventures

Case studies of major projects and leading international firms are used to examine the real-world challenges facing the project business enterprise in different industry sectors (e.g. infrastructure, high-tech, consulting, film, etc.).

By positioning the notions of innovation and dynamic change at the heart of a definition of project management rather than focus only on keeping activities on time, on budget and to specification we aim in the course to challenge conventional views of project management.

Knowledge Objectives

Students are introduced to the key concepts and methods of traditional project management, types of project organisations and project-based strategies for both efficient deliveries as well as for innovation in different firms and industries. Using practical examples, the course will demonstrate how these approaches can be successfully applied in the management and organisation of any major project and firm.

Skill Objectives

Students should develop an appreciation of the skills required of project managers:

- Entrepreneurial and strategic skills
- Organisational and team-based skills
- Integrative skills from both a project and business perspective
- Basic software-based tools and techniques¹.

LEARNING OUTCOMES

Upon completion of this course, students will be able to:

- Analyse, interpret and provide solutions to strategic and organisational challenges involved in the management of projects, project-based innovation and the project business enterprise.
- Use and apply basic tools of project management in contexts likely to be encountered in practice.

TIMETABLE AND ORGANISATION

The course is based on 10 interactive sessions on key topics in project management. The main part of these will be delivered as lectures, while a few may be provided as online sessions and focused on learning skills in handling a software based project management tool

The lectures are illustrated with examples of major private and public sector projects and the experiences of leading international firms. The use of case-studies will illustrate the challenges of managing projects and project-based organisations in real-world settings. Course notes are prepared in PowerPoint format and distributed to students for note taking at each lecture.

Despite the number of participants in the course it is designed to have a high degree of interaction in order to yield full output for students. Arguments and insights raised in the texts in the syllabus will be presented and explained however analysis of texts and cases will demand strong student engagement. Students are expected to participate in discussions and exercises related to the topic of each week's session.

The course aims also to test various options to promote interaction in the lectures among these new ICT based tools and online simulation².

An online discussion board will be set up on the ICT tool Blackboard, where students can ask questions to each other as well as the course convenor and in general have discussions on course relevant topics.

The course benefits from having experts in specific relevant topics from the faculty of Imperial College Business School to teach on the course. We aim also to invite one project manager from industry or from Imperial College project organisation to come and talk for one hour about real world experiences in the field of project management.

RECOMMENDED TEXTS

The course will be based on two key textbooks:

- Shenhar, A. and Dvir, D. (2007), *Reinventing project management*, Boson MA., Harvard Business School Press
- Davies, A. and Hobday, M. (2005), The business of projects: managing innovation in complex products and systems, Cambridge: Cambridge University Press.

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¹ This may be subject to change.

² This may be subject to change.

However, in order to gain full outcome of the course students are strongly recommend reading also the texts specifically suggested for each session. The course reading material includes specific texts on different topics involved with project management and innovation through projects.

ASSESSMENT

- Coursework assignment:
 - Group project poster presentation (25%)
 - o Individual completion of project management simulation³ (5%)
- Closed book final examination (70%) composed of:
 - o A multiple choice test
 - Three mandatory short questions
 - One questions selected out of three options for wringing a short essay (1500 2000 words)

Project poster presentation. A group work assignment examines the management of an individual project. The exercise is designed to illustrate the practical challenges involved in managing the project, including an evaluation of 'hot spots' (problem areas in the project) and 'beauty spots' (areas of good practice) in the project. It should also assess the strategic importance of the project to the firm or group of firms involved. Referring to project and company background information from personal experience or secondary sources, the poster presentation should reveal interesting project events, people and organisational challenges. The assessment of this exercise is based on: 1) the production of a good visual poster, 2) presentation to the course convenor and an additional internal staff member of the business school 3) a final brief discussion between the group and the course convenor and an additional internal staff member of the business school. The poster presentation should demonstrate a detailed understanding of the course material.

CONTEXT

In today's rapidly changing technology and market environment, project-based management and organisation provides a highly flexible, efficient and responsive means of developing new products, shortening times to market, building major infrastructure systems and coping with the ever-increasing flow of new and more complex business opportunities. Firms must have managers that are able to manage change through projects. The recent trend for large firms and government organisations to outsource non-core functions is creating opportunities for suppliers (so-called 'systems integrators') to provide solutions to each customer's outsourcing needs based on projects. The result of these changes has been a growth in the number and type of projects (e.g. Private Finance Initiative and Public Private Partnerships) that have to be successfully managed. It is vital, therefore, that managers understand the tools, approaches and strategies for managing projects and project-based organisations.

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³ This may be subject to chance

What do the students think of the BSc in Management?

'Although some modules have some clinical relevance Management is an interesting break from Medicine. It's a challenge due to the huge volume of work and the pace of the course, but I think that's what makes the course what it is. It's a tough ride, and you're not guaranteed a top grade even if you think you've worked enough for it, but I enjoyed every minute! The staff are really friendly and approachable and there's a real community feeling. Management is useful for learning how hospitals are run, it increased my knowledge of running a business one day irrespective of whether it is medical or business orientated. We socialised as a group every day at lunchtime and evenings, as well as during group work. Also we had special socials organised at least twice a term which were heavily subsidised. Management was brilliant! Everyone should do it!'