



The Hebrew University of Jerusalem

Syllabus

Quantitative methods in organizing planning and control of health services - 98445

Last update 20-07-2020

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Health Care Administration

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Jacob Schreibman

Coordinator Email: arhhcnih@zahav.net.il

Coordinator Office Hours: By appointment with the lecturer

Teaching Staff:

Schreibman Yaacov

Course/Module description:

Modern Management of Systems, at any level, requires the assessment, analysis, planning and evaluation of alternatives and situations based upon quantitative and objective basis.

Although the final managerial decision is more complicated as it involves and considers other components of the organizational mission and objectives, the neighboring socio-organizational envelope and the patterns attitudes and tradition of the organization and the aspirations of the individuals operating within it; the basis for every discussion and decision making process is the quantitative analysis and planning of the implications of various scenarios and managerial alternatives. The course objective is the acquiring of general knowledge and utilization of basic generic quantitative tools in planning analysis and budgeting of Non For Profit organizations.

The course is built of lectures, analysis of relevant articles, and exercises (including field exercises), in which studied techniques will be applied, accompanied and supported by independent managerial thinking of the students, for the planning and control of organizational systems, definition of managerial problems and analysis of their feasible solutions.

Course/Module aims:

To provide the students with control tools and basic quantitative techniques used as a routine in management of Health and other Non-For-Profit organizations at the micro level, and to provide basic integration of models and methods learned in earlier academic courses – such as microeconomics and statistics and knowledge to use basic disciplines and tools of operational research and management engineering and their integration, aiming to advance and comprehend organizational insight and analysis of their planning conditions and managerial control based on quantifiable data.

Learning outcomes - On successful completion of this module, students should be able to:

*On successful completion of this course module, the students should be able to:
Measure outcomes (beyond the technical tools to be conferred):*

Understand the language and culture, of Non for profit organizations so to become be-dialogue partners with organization policy makers at every level;

Understand the need and ability to work on a quantitative basis;

Understand the limitations of mathematical models and quantitative approach in general;
Understand the capabilities and limitations of managerial maneuvering at the economic sphere-nonprofit's mission;
Implement the need for routine observation and control of the organization and its tasks on the basis of I:O indices;
Control the reading of data, their criticism, creation of insights from them, use them wisely and in a focused manner ;
Prepare comprehensive business project/program at a good basic level;

Prepare a report for the manager "in charge";

Attendance requirements(%):
100

Teaching arrangement and method of instruction: "Rules of the game"

1.1 The course is built on 13-14 sessions (depending on the university annual A detailed course schedule will be attached (annually).

Participation in all lectures is a basic requirement of the course. Student who will not participate in 3 or more sessions (not severely preventable) will not receive a course grade. Planned absences have to be informed to the instructor in advance. If the number of sessions given will less than the minimum teacher's discretion complementary (mandatory) lessons will take place at the end of the semester completion..

Dates of those complementary sessions - will be coordinated by students majority and lecturer's ability.

The Lesson start ontime . No entry to class will be allowed later.

1.2 Each week a home exercise will be served and submitted. Submission is mandatory on the date set for submission.

1.3 It is possible (and advised) to submit exercises in pairs (but not more than 2 students at a group). Students can change the composition of couples (or move individual submission, and vice versa) during the semester, it is subject to the personal judgment of each student.

1.4 Some of the exercises shall be submitted by each student as a personal work. Defining a "personal task" will be by the instructor.

1.5 Submission of every exercise date (usually the following week to provide task) is mandatory.

For Exercise that will not be submitted on time - Scores will be recorded as 0 (and will not be checked)

Late submission will be allowed only with the pre-approval of the lecturer (except for serious reasons also as army reserves service, or similar personal reason) and will reduce the final score 1 point per exercise submitted late.

1.6 Some exercises will be presented in class as a case by one of their writers.

Students are required to keep a copy of the works on DOK, and bring them to class, to enable easy viewing and discussion.

1.7 All exercises will be submitted printed, only in a format of "Management Report"

defined below (see 1.12).

Exercises submitted otherwise - will not be checked.

1.8 In the absence of "the school solution" for every situation possible - each approach and original ideas, unconventional (and "weird") as may be and any solution suggestion will be welcomed, as long as feasibility is proven along the course methods taught.

1.9 field exercises members may consult any course partners and/or any other external source.

It is Strictly forbidden to consult for a fee. Payment for the course exercises preparation is considered a severe ethical offense that would immediate cause an expulsion of the student from the course.

1:10 An half semester exam will be given. The lecturer keeps a right not to demand it according to his sole judgment according to the progress of the class.

1.11 During the course, students will submit (on a personal basis) reports on articles/ literature / cases based on data on specific issues (personal search based defined by the lecturer).

1.12 Exercises configuration will be submitted in "Management Report" format , according to the following structure:

A. Introduction - up to 3 lines

B. Definition of the problem – up to 6 lines (tagged) .[See how to this document is arranged]

C..Principle proposed solution - to 8 lines (labeled)

D.. Assumptions underlying the solution - to 8 lines (labeled)

E. The. Constraints and limitations - up to 6 lines (labeled)

F.. Detailed solution - not more than half a page. Avoid unnecessary repetition of what has been already written.

G. Measures that are required - up to 8 lines (labeled)

Appendices - through the solution, calculations, graphs etc.,

Recommended - downplay writing "fiction", and prefer, to the extent possible presentation - tables, and diagrams / charts / graphs.

Important: make sure the "Discipline of significant digits"

1.13 It is pre-requisite requirement to have the ability of using personal computer software, WORD, EXCEL (!) These are Prerequisites for participation in the course.

1.14 A final semester field task will be submitted (there is NO Final exam).

Subject Platform of the project will be approved in advance by the instructor, following a written project proposal which will be submitted towards the last month of the semester, date determined by the instructor. Proposals will not be accepted after the deadline prescribed topics.

Students are allowed (and recommended) to prepare the final project in pairs.

Submission of the project will be determined no later than approximately 6 weeks after the end of the course - after the period of the semester exams.

The exact date will be determined during the course.

Final tasks will not be accepted for review after the deadline to be determined.

Final project will be delivered to the program's secretariat.

Final project will include, at a minimum:

A Full Business Planning - Planning tasks and activity framework, budgeting, sources and uses of financial statements, cash flow planning, technique and control indicators

1.15 The final score composition:

65% to 70% - weekly exercises.

Each separate score weighting exercise in determining a final grade part - mainly by the degree of importance, but also by the degree of investment required.

30% 35% - Final Project concludes.

If half semester will be examined - weighting will be 10% on account of the weekly exercises. Weighted exercises will be amended accordingly.

Change in composition of the score ingredients is at the sole discretion of the instructor.

1.16 meaning of scores used in this course:

B 80; lesson achievement implemented correctly as expected in general, while operating, and using intelligent technique which is the object of the exercise.

B is the standard grade the exercise fills the basic requirements lesson and achievement.

A 95; beyond the lesson and achievement drilled correctly - presented approach capability using advanced quantitative analysis, and / or idea Organizational / creative processes supported tools previously learned quantitative or quantitative information presented in more based;

C 65; the lesson is not being met in full - or only partially achieved.

(+ / -) Express the addition / subtraction of 5 points in each direction.

Grade Less than C (-): (ie - less than 60)

Work is not suitable to the required level. Exercise will not receive points..

Given extra point (bonus) on a good presentation of exercise class.

Points are deducted for submitting exercises lately and / or delay the final project (submission only by approval ahead by the instructor only).

1.17 in exceptional certain cases - and only by teacher initiative and planning it may allowed to submit an additional version of exercise that was unsuccessful. (Reduced grade points).

1.18 Students are asked to transfer media info, especially the e-mail address, and update it in time if needed to enable contacts and messages.

1.19 Material and communications will be delivered by mail only.

Through Email also will be sent materials as preparation for next lesson (from session No. 2 and on), and will include main short presentation materials to be used in the lecture. Highly recommended to print (and / or copy to DOK) and bring for the classroom.

1.20 Hours and advice

Usually held later in class, and will be limited by the demand ..Pre-arranged schedule with the lecturer via email.

Room Location hour reception may vary - but will be on campus at which the course

is given..

You can also consult with the lecturer by phone by leaving a message on a cell phone 050-7592246.

Guaranteed Return, although not immediate, and usually in the evening.

You can, and should, communicate by email arhhcnih@zahav.net.il

1.21 "technical accessories"

During every lesson cellular devices of any kind must be switched off.

Cellular Device used in the classroom during the lesson will immediately cause user's removal from the class.

It is allowed to use a laptop.

Audio recording and / or photo during class requires the approval of the instructor.

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... Yes, the course presents multiple job requirements, and not a small investment of time.

Congratulations for successful work, productive and fun!

Course/Module Content:

- The business environment conditions as leading basis for the needs for micro planning;

- Basic principles of organizational methods approach. Parameters of systems efficiency;

Optimization under constraints;

- Paraeto approach for identification of systems failures and opportunities ;

- Approaches of work processes analysis and improvement;

- Introduction to service plant layout principles as tools for improvement;

- Labor standardization based upon work measurement;

- Forecasting of services demand and supplies based upon time series analysis;

- Control of logistic and supplies supporting services;

- Costs at Non For Profit organizations ;

- Principles of Budgeting at Non For Profit Organizations;

- Cost accounting of services;

- Introduction to economic evaluation of projects and programs;

- Structuring of NFP Business Plan;

- Alternatives evaluation;

- Parameters for objective control.

The Lecturer reserves the right to change add topics according to his sole consideration

Required Reading:

חובה לקרוא/ לעיין (ולפחות להציץ!)

חוק פרקינסון ועוד עיונים בבעיות מינהל

פרקינסון

הוצאת הדר

The Peter Principle: why things always go wrong. Dr. Laurence J. Peter; Raymond Hull (1969). William Morrow & Company, Inc. הוצאת "העיקרון הפיטרי" / הוצאת 1968 שקמונה

(2006) חוברת 34 ארץ אחרת

מאמרי חובה:

שלמה וגנר *But first Let's do the numbers*

הרגשה של שליטה / אנשילפפר

מחקר ללא ענווה/ צבי בקרמן

תכנון הייצור והתפעול/ סטיבן, נחמיאס / הוצאת האוניברסיטה הפתוחה 2005

ניהול התפעול ושיפור ביצועים / גלורזון/ דיונון 2003

מדידת עבודה / ד"ר אבינועם בן אריה / בית הספר לטכנולוגיה של האוניברסיטה הפתוחה 2004

Jim Ayers; *Supply Chain Strategies, Information systems managements*, spring 1999

<http://www.civil-service.gov.il/NR/rdonlyres/B91689D2-2D32-47A0-BC01-DECAB580D615/0/Guidance82008.pdf>

Additional Reading Material:

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מומלצים כספרות עזר ולעיון נוסף -

מבוא לחשבונאות ניהול ותמחיר/ יהושע לבנת/ הוצאת האוניברסיטה הפתוחה

תורת המחירים/ יערי, ניצן ועוד/ הוצאת האוניברסיטה הפתוחה (חוברות 1-12

מבוא לכלכלה/ זימון, הירש / רונאל

Financial Accounting and Managerial Control for Nonprofit Organizations

Herzlinger & Nitterhouse

South Western 1994

Microeconomics & Public Policy

Apgar & Brown Scott Foresman& Company

Managerial Economics 5th edition Mansfield, Allen, Doherty, Weigelt Norton

The management of nonprofit organization

McLaughlin - Part IV ch. 10-12 658.04

Public Finance, 8th edition 2008 Rosen. Gayer McGraw Hill

Cost-Benefit Analysis Sassone, Schaffer Academic Press (1978)

Motion and time study Barnes John Willey (1985)

Plant Layout and Material handling J.M.Apple John Willey (1987)

Operations Research in Production Planning Scheduling and Inventory Control
Johnson, Montgomery John Wiley (1986)
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Predicting the Future Cambridge University Press

Forecasting and Time-Series Analysis Montgomery McGraw Hill

Costing Human Resources Cascio NY – Van Nostrand Reinhold

Direct Costing Arnstein NY AMACOM

Zero Base Budgeting & Program Evaluation
J. Wholey Lexington

Zero-Base-Budgeting Austin NY-AMACOM

Budgeting – a Comprehensive Theory Wildousky New Brunswick

Budgeting and Planning Burkhead MY General Learning Press

Budgeting Fundamentals for Nonfinancial Executives Sweeny, Alen NY-AMACOM

Journal of Public Budgeting, Accounting and Financial Management

Budgeting for Non-For-Profit Organizations Vinter, Kish NY Free Press

Planning Programming Budgeting – a system approach to management

אוסף מאמרים

Utility Cost 9 מאמר

benefit Cost 10 מאמר

A planning Programming & Budgeting Manual
JanesCutt

Course/Module evaluation:

End of year written/oral examination 0 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 35 %

Assignments 55 %

Reports 0 %

Research project 0 %

Quizzes 10 %

Other 0 %

Additional information:

None