האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

QUALITY MANAGEMENT IN FOOD INDUSTRY - 71459

Last update 06-10-2015

HU Credits: 3

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: biochemistry & food sciences

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Rehovot

Course/Module Coordinator: Ms. Galia Cukierman

Coordinator Email: Galia.Cukierman@mail.huji.ac.il

Coordinator Office Hours: in the end of the lecture

Teaching Staff:

Ms. Galia Cukierman

Course/Module description:

Quality assurance and quality control. Quantitative analyses of food products. Statistical tools and statistical inference for quantitative and qualitative analyses. Quality control of raw materials,process and final products. Sampling,acceptable quality level (AQL) Israel and international standards for sampling. Statistical process control (SPC). Types of control charts. Control limits and specifications. Good manufacturing practice (GMP) in food industry.

Course/Module aims:

Understand approaches to quality management.
providing knowledge in understanding and applications of quantitative tools used for data analysis and process control.

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

At the end of the course the student will be knowledgeable about quality management approaches and with the ability to apply quantitative tools used to analyze data and processes emerald

Attendance requirements(%):

100

Teaching arrangement and method of instruction: lectures, exercises, events based on reading material and tour in factory.

Course/Module Content:

1.Introduction, definitions of quality, quality control and quality assurance.
2.Theories of management, quality management, TQM, Deming principles of quality management.
3.Standards for quality management systems, ISO IS 9001, IS 22000 to their application in the food industry, manufacturing proper conditions.
4.variation in processes. Location and dispersion process.
5.Data types and their treatment of statistical tools for data analysis.
6.Control charts for variables and attributes. Control limits and specification requirements. Analysis of control charts.
7.Control charts for attributes, metrics, process capacity.
8.Sampling plans. Israeli Standard 936.

9.Costs of quality, continuous improvement and sustainability
10.Food factory tour.

Required Reading:
lectures

Additional Reading Material:
t, E.L. and Leavenworth, R.S. Statistical Quality Control. 7th ed. Mc-Graw-Hill, NY. (1996).
Hubbard, M.R. Statistical Process Control for the Food Industry. 2nd ed. Chapman & Hall (1996).
Montgomery, D.C. Introduction to Statistical Quality Control. 5rd ed. Wiley, NY. (2005).
Mortimore, S. and Wallace, C. HACCP A Practical Approach. Chapman & Hall, London (1994).
Walton, M. The Deming Management Method. Putnam Pub. Group, NY. (1986).
Wheeler, D.J. and Chambers, D.S. Understanding Statistical Process Control. Statistical Process Control Inc. Knoxville, Tennessee (1986).
בשן, אביבה. 2001. ניהול האיכות- הבטחת איכות ובקרת איכות סטטיסטית. "לוג'יק" הוצאה לאור, כפר סבא.
ישיקאווה, קאורו. 1985. מדריך לבקרת איכות. (א. הדר, עורך). "שבא" שרותי בקרת איכות ת"א.
שור, חיים. 1998. הנדסת איכות. האוניברסיטה הפתוחה, תל-אביב.
שור, חיים. 1995. איכות כוללת, בקרת איכות ותכנון לאיכות. מהד' ב', הוצאת המחבר, תל-אביב.
תקנים ישראליים: ת"י ISO 9001:2008,ת"י 1432, ת"י 936. מכון התקנים הישראלי, ת"א.

Course/Module evaluation:
End of year written/oral examination 90 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 10 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information:
None