

New course:

Statistics for sensory and consumer science

Venue Nofima, Osloveien 1, Ås, 30 km south of Oslo

Cost NOK 10.000,- and additional NOK 500,- for the book

Start 9. November 2011

End 11. November 2011

In all parts of society the amount of available data increases every year. Only a small portion of it is, however, utilised efficiently. In this course you will get an overview of some of the most important and useful tools and methods that can be used for extracting useful information from sensory and consumer data.

The course will give you an improved basis for utilising and understanding your data better and then also a better basis for useful conclusions.

The course will focus on statistical analysis of sensory data, consumer liking data and relations between them. The aim is to present the most important methodologies for

- quality control of sensory panel data
- interpretation of multivariate sensory panel and consumer liking data
- linking consumer liking data to intrinsic and extrinsic product attributes and
- studying individual differences and segmentation in consumer liking data

The presentations will cover both basic ideas, a large number of relevant examples, computer demonstrations and also some hands on activities. The first day will be set aside for analysis of sensory data only while the following two days will be devoted to consumer liking data and links between consumer data and sensory panel data.

The course will be based on the book: Statistics for sensory and consumer science (2010), J. Wiley and sons, written by the tutors of the course. The basic methodologies covered will be based on principal component analysis, ANOVA and PLS regression.

For the analysis of sensory panel data we will focus on the open source package “PanelCheck”, developed by the tutors of the course. For the consumer data, demonstrations will be given based on the Unscrambler and Minitab.

It will be required that participants have a basic knowledge of statistical terms such as correlation, standard deviation, simple linear regression and hypothesis testing. It will be an advantage with some knowledge of principal components analysis.

Tutors: Tormod Næs, Per Brockhoff and Oliver Tomic

Programme:

9. November (09.00-16.00)

- Lecture: Introduction to principal components (PCA) analysis and multivariate regression (TN) (45 minutes)
- Lecture: Introduction to analysis of variance, ANOVA (PBB) (45 minutes) (One way and two-way with no reps)
- Lecture: Monitoring sensory panel performance and quality (OT), (45 Minutes)
- Hands on activities using the PanelCheck software (OT) (Simple monitoring – e.g. P-MSE plot etc. and simple ANOVA for complete consumer data – two-way with no reps)

10. November (09.00-16.00)

- Lecture: Applications of PCA for sensory panel data - maybe Tucker plots (OT) (45 minutes)
- Lecture: Applications of ANOVA for sensory panel data, 2-way with reps and 3-way. (45 minutes)
- Hands on activities using the PanelCheck software continues (OT)
- Applications of PCA and ANOVA for sensory panel data + hands on (PBB and OT)
- Lecture: Preference mapping with examples (TN) (45 minutes)

11. November (09.00-16.00)

- Preference mapping continues + hands on (TN, OT).
- Lecture: Conjoint analysis: Experimental design and analysis of consumer data (PBB and TN)

Practical information

Contact persons are Tormod Næs (tormod.naes@nofima.no) and Lily Rømcke (lily.romcke@nofima.no)

There will be arranged a dinner for all participants in the evening of November 9. The cost will be 500 NOK.

Registration for the course can be done using the link:

<http://www.nofimamat.no/app/paamelding.nsf/arrEng.xsp>

Accommodation must be organised by each participant. Some possible hotels in the neighbourhood are:

Drøbak - 10 km from Nofima

<http://www.reenskaug.no/>

Ski - 10 km from Nofima

<http://www.thonhotels.no/hoteller/land/norge/ski/>

Close to the Central Station of Oslo - 35 km from Nofima

<http://www.hotell.no/hotell/norge/oslo/comfort-hotel-borsparken>

Close to the Central Station of Oslo - 35 km from Nofima

<http://www.rica.no/Hotels/Rica-Oslo-Hotel/>

Travel information will be given later