



# **PNS0146 Introduction to hyperspectral imaging with focus on near infrared spectroscopy, 3.0 credits**

**PhD course arranged by Graduate School for Veterinary Medicine and Animal Sciences (GS-VMAS)**

Course date: April 23-25 and May 14-16, 2018

Location: Umeå (SLU)

## **Content**

The course offers an introduction to hyperspectral imaging using desk top/lab, airborne (drone) and satellite techniques for the classification and quantification of spatial distributions and chemometrics in animal, agricultural, Veterinary Medicine food, ecology and related sciences. The students will learn to interpret hyperspectral images and data analysis by user-friendly and intuitive software solutions.

The students will be introduced to the basics of chemometrics, near infrared spectroscopy and digital imaging by state of the arte lecturing, practical laboratory work using, high-speed hyperspectral instruments. The course also includes introduction to RAMAN SPECTROSCOPY and MICROSPECTROSCOPY. Applications will be presented on animal tissue, plants, food products (e.g. cheese and meat), field plots and landscape levels.

## **Prerequisites**

Admitted to a postgraduate program in animal/agricultural/forest/landscaping sciences, archaeology, veterinary medicine, food science, or related subjects, or to a residency program in veterinary science.

Information and application: [www.slu.se/gs-vmas-courses](http://www.slu.se/gs-vmas-courses)

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**Last date for application: February 28th, 2018**