

MODULE	RISK ANALYSIS
Qualification objectives	<p>The central role of Risk Analysis (RA) techniques in assessing risk to animal and human health (and even life)..</p> <p>By the end of the unit students should be able to:</p> <ul style="list-style-type: none"> • understand types and stages of qualitative and quantitative risk assessments; • be familiar with modeling techniques in quantitative risk assessments; • to apply risk analysis to Veterinary Public Health-Risks and • know the principles and techniques of risk management and risk communication.
Topics	<p>The RA process consists of a series of interlinked principles and phases of qualitative, semi-quantitative and quantitative risk assessments. Computer programs are used to model the relationships among the phases involved in quantitative risk assessments</p> <ul style="list-style-type: none"> • Background to Risk Analysis (Domestic Legislation, International Agreements and Standards) • Basic concepts of Risk Analysis (Risk, Uncertainty) • Components and Definitions of Risk Analysis: Risk Assessment, Risk Management, Risk Communication • Qualitative Risk Assessment: • Quantitative Risk Assessment (QRA): Deterministic analysis, Probabilistic (Simulation) analysis, • Basic Probability and Probability Distributions used in QRA • Building a QRA model • Modelling the Farm to Fork Chain (Food Chain Model)
Teaching Strategy	Contact studies (lectures, seminars, group work, PC lab); self studies (home work, reading, assignments)
Organizer	Coordinator: Prof. Dr. Karl-Hans Zessin
Workload	Total learning time is 150 hours; lectures = 90 h, group work/ practicals/ assignments = 30 h, preparation/ progress control assignment = 30 h