

## **Assistance in the Formulation of Module Aims**

### **Competencies**

The conditions under which graduates must assert themselves in the world of work today and in the foreseeable future require a competence profile with the following dimensions:

#### **(1) Subject Competency**

The competence that arises from the expertise and knowledge of the special problems and circumstances that exist in a problematic area. In particular, the ability to recognize, analyze and evaluate the particular problems that are relevant within the framework of agriculture.

#### **(2) Application Competency**

Agricultural and nutritional economics serve practical purposes. Therefore, graduates need to rely on the knowledge and know-how gained through their studies in order to find solutions for existing as well as newly appearing problems within the agricultural and nutritional sectors.

#### **(3) Methodology Competency**

The professional practice of agricultural and nutritional economics expects university graduates to have the ability to use scientific methods. These methods can be divided into well-structured and poorly structured methods. Without a doubt, among the poorly structured methods are the general scientific methods of discovering the new, of questioning the familiar and the methods of convincing with key arguments the most commonly used methods. Among the well-structured methods, the use of mathematical-statistical methods, in addition to the various subject-specific specialized methods, predominates.

#### **(4) Learning Competency**

The rapid progress of the agricultural and nutritional sciences has resulted in the shortening of the validity period of scientifically-backed knowledge. Accordingly, the idea that a university education provides a lifelong valid foundation of knowledge for a highly qualified occupation has lost meaning. The modern approach of lifelong learning requires graduates to go beyond the expertise acquired during their studies and to engage in self-driven and self-supporting independent learning and continuing education. Special challenges, through which students can develop their learning competencies, are presented in the form of project papers and the Bachelor Thesis.

#### **(5) Social Competency**

The solving of complex and challenging problems requires the cooperation of specialists from different areas of expertise. Therefore, in addition to having subject, application and methodology competencies, graduates are also required to have social competence, an absolute necessity for the productive work within problem-oriented cooperative project teams. Social competence, however, should not be limited only to being a team player, but should also incorporate the ability and willingness to take on civic responsibility.

#### **(6) Key Competencies**

Presentation techniques, oratory, digital media competence, language skills and other 'soft skills' belong to this category.

## Cognitive Level

### Cognitive Level I: Knowledge

Students can remember classifications, categories, criteria, methods, events, words, technical terms, symbols, formulas, data, places, people, etc. and their characteristics.

*to know...*

*to have knowledge of...*

*to know methods of...*

*to understand the basic structure...*

*to have acquired knowledge*

*to be familiar with...*

*to know about....*

*to become acquainted with...*

*to understand the sense and meaning...*

*to see into something....*

*to be sensitized...*

*to have an understanding of...*

*to have acquired an overview of...*

*to differentiate between different types of...*

*to have specialized knowledge in the area of...*

### Cognitive Level II: Comprehension

Students can comprehend events, summarize information, translate news in one form (e.g. formulas) into another (e.g. graphics), extrapolate trends as well as deduce implications or consequences of events.

*to understand...*

*to comprehend something...*

*to be in the position to translate*

*to translate a situation or facts into another form*

*(e.g. a table into formulas)*

*to gain insight into something....*

*to be able to interpret something...*

*to be able to present (describe, explain)*

*something....*

*to be able to discuss something*

*to attain deeper knowledge of....*

*to be able to differentiate between different perspectives*

*to be able to deal critically with a subject*

*to be able to reflect on something...*

*to be able to recognize tendencies*

*to be able to deduce Y from X*

*to be able to classify something*

*to be able to assess something*

*to have an overview of something*

*to understand the meaning of something*

*to be able to interpret something*

### Cognitive Level III: Use

Students can utilize their knowledge in light of actual events and circumstances.

*to have the skills to..*

*to be able to utilize...*

*to be able to observe... (to determine;*

*to realize)*

*are able to communicate...*

*to have a command of various techniques*

*(methods) to solve/deal with....*

*to be able to come up with practical solutions*

*to problems*

*to have gained experience to...*

*to be able to apply....*

*is qualified to...*

*to have experience in...*

*to be able to work independently...*

*to be able to competently apply*

*concepts on a case-by-case basis*

*to be able to come up with concepts and*

*realize them*

### **Cognitive Level IV:**

#### **Analysis**

Students can identify the relevant elements of a piece of information. They are able to recognize the relationships between the elements as well as relay the connectivity of arguments. As well, they demonstrate the ability to recognize the structure of the involved principles.

*to be able to analyze something... to recognize the cause of... to have the ability to interpret something... to use methods to...  
to have the ability to deduce something... to be able to use methods and instruments to  
to be able to solve problems... assess/evaluate... to be able to evaluate and analyze something to explore...  
to take on practical problems and find a specific solution to solve it to solve problems...  
address to deal with/handle something... to be able to independently correlations/relationships*

### **Cognitive Level V:**

#### **Synthesis**

Students are able to connect events and circumstances and integrate or add elements to the whole. They construct structures and systems, which were not initially visible.

*to recognize... to recognize (to comprehend; a command of...) the relationship between...  
to have to recognize relationships (interdependencies) between...  
to plan (design) independently... to recognize structures  
(system to be able to deduce interrelationships correlations/interconnectiv  
ity) from individual observations (individual facts) to be able to add  
components to...*

### **Cognitive Level VI:**

#### **Evaluation**

Students are able to assess a situation by utilizing internal as well as external evaluation criteria.

*to be able to evaluate... to be able to make evaluations of... to be able to understand... to evaluate alternatives to be able to judge something...  
to be able to evaluate something... to be able to estimate something...  
to be able to recognize the meaning of something...*

#### Literature:

"Checklist" zur Formulierung von Studienzielen für Curricula. Rektorat Ressort Lehre. Uni Basel. November 1999.