

Compulsory Modules

Research Methods I					
Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-FM1	135 hours <ul style="list-style-type: none"> • 90 in-class hours (incl. online-presence) • 45 hours self-study 	5	1 st semester	Winter semester	1 semester
Module-type			Level of the module	Language	
Compulsory			Bachelor	German	
1	Qualification objectives				
	<p>Students will become familiar with fundamental, interdisciplinary, essential techniques in the approach to research findings and their application as well as to work independently scientifically. The students are able to:</p> <ul style="list-style-type: none"> - name fundamentals of scientific working and to describe the criteria of good scientific practices, - explain why the criteria of scientific working are relevant for the students own work (at the university or later in working life), - understand epistemological models and models of philosophy of science, - classify and to oppose fundamental concepts and methods of quantitative and qualitative research, - describe hypothesis testing and hypothesis generating, qualitative and quantitative research designs, - plan basic, scientific questions/studies, - select empirical methods for issues of Nutritional, Food and Consumer Sciences, to apply them as well as to assess their significance, - discuss the requirements and limitations of empirical assertions. 				
2	Content of the module				
	<ul style="list-style-type: none"> - Fundamentals of the theory and philosophy of science - Criteria of scientific working and good scientific practices - Examples of application and practice of science and research - Introduction to empiricism <ul style="list-style-type: none"> • Formation of hypotheses • Samples and sampling methods • Planning of surveys, research designs (quantitative und qualitative) • Structuring of questionnaires • Different survey methods (e.g. interviews, biological material) • Preparation of measured data, determination of variables, application of scales • Interpretation and evaluation of findings of empirical studies 				
3	Teaching methods				
	<ul style="list-style-type: none"> - 2 SWS lecture - 2 SWS seminar - 1 SWS exercise 				
4	Requirements for participation None				
5	Requirements for receiving credits				
	Regular participation in the seminar, completion of exercises; passed module examination				
6	Usability of the module				
	Compulsory in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM				
7	Examination type				
	Written examination				
8	Remarks				
	None				
9	Methods of assessment				
	Grading				
10	Responsible for the module				
	Chair of Nutritional Epidemiology – Preventive Strategies (ad interim)				

Research Methods II

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-FM2	135 hours, divided in <ul style="list-style-type: none"> • 90 in-class hours (incl. online-presence) • 45 hours self-study 	5	2 nd semester	Summer semester	1 semester
Module-type				Level of the module	Language
Compulsory				Bachelor	German
1	Qualification objectives				
	<p>The students gain specialised, interdisciplinary and methodological competencies regarding the handling of statistical practices to work scientifically and independently. The students are able to:</p> <ul style="list-style-type: none"> - apply fundamental methods of descriptive statistics and to interpret findings, - apply fundamental methods of evaluative statistics and to interpret findings, - apply fundamental methods of qualitative data analysis and to interpret findings, - understand the uncertainty of (measurement) results, - outline data analysis and data evaluation in the field of Nutritional, Food and Consumer Sciences and to apply them exemplary, - apply statistics software. 				
2	Content of the module				
	<p>Fundamentals of Statistics</p> <ul style="list-style-type: none"> - Basic population and sample, definition of characteristics - Descriptive parameters (sum parameter, range of dispersion) - Importance of probabilities and its handling - Empirical distribution, (distribution models, normal distribution) - Display statistical evaluation (tables, graphs, ...) - Interpretation of data <p>Fundamentals of evaluative statistics</p> <ul style="list-style-type: none"> - Statistical test, null hypothesis, decisional error of first and second kind - Test distributions (examples: t-distribution, χ^2-distribution) - Test procedures (examples: test to find out the compliances of mean values and frequencies) - Regression analysis and correlations - Uncertainty of (measurement) results - Parameter free tests - Basic principles of Bayes statistics - Interpretation analysis results <p>Fundamentals of qualitative data analysis, e.g.</p> <ul style="list-style-type: none"> - Grounded theory - Analyses of contents - Case interpretation <p>Application of statistic software</p>				
3	Teaching methods				
	<ul style="list-style-type: none"> - 1 SWS lecture - 2 SWS seminar - 2 SWS exercises 				
4	Requirements for participation				
	Contents of the module Research Methods I				
5	Requirements for receiving credits				
	Regular participation in the seminar, work on exercises; passed module examination				
6	Usability of the module				
	Compulsory in the BSc Dietetics. BSc Oe:EGL and BSc Oe:VVM				
7	Examination type				
	Written examination				
8	Remarks				

None

9 Methods of assessment

Grading

10 Responsible for the module(r)

Chair of Nutritional Epidemiology – Preventive Strategies

Case study I to work on an explorative/interpretative problem

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-FLS	135 hours <ul style="list-style-type: none">• 72 in-class hours (incl. online-presence)• 63 hours self-study	5	3 rd semester	Winter semester	1 semester

Module-type

Compulsory

Level of the module

Bachelor

Language

German

1 Qualification objectives

The students are able to:

- apply the interdisciplinary skills from academic studies in the context of a case study self-dependent
- identify a practical and realistic problem related to dietetics and choose methods of evidence based practise for this dietetic problem
- apply qualitative research methods and analyse and evaluate findings
- represent the reflection process: explain and evaluate the decision process and draw conclusions from the case study

2 Content of the module

- Methods of Evidence Based Practise EBP
- Present a problem and work on an objective target
- Design and implementation of a case study in small groups
- Documentation and presentation of in common developed findings
- Reflection of EBP

3 Teaching methods

- 1 SWS seminar
- 3 SWS group work

4 Requirements for participation

None, Contents of the module Research Methods I

5 Requirements for receiving credits

Passed module examination

6 Usability of the module

Compulsory in the BSc Dietetics

7 Examination type

Portfolio examination: Represent the development process of acquired skills and findings as well as reflection of project work

8 Remarks

The module is in contact to the module research methods I. Students shall work in small groups with methods of EBP on a clinical problem. One of two types of clinical problems shall be worked on:

1. Explorative clinical problem: attempt to explain human activities and attitudes in context health care (interpretative paradigm/qualitative research)
2. Descriptive clinical problem: Descriptions of phenomena inside an established a network of knowledge with qualitative research, survey research, clinical audit (combination of quantitative and qualitative research methods)

9 Methods of assessment

Grading

10 Responsible for the module

Study program manager

Study Project					
Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-PRO	270 hours divided in <ul style="list-style-type: none"> • 162 in-class hours • 108 hours self-study 	10	4 th - 5 th semester	Every semester	2 semester
Module-type Compulsory			Level of the module Bachelor		Language German
1	Qualification objectives The students are able to: <ul style="list-style-type: none"> - apply the methods of project management, to work together on a project and to complete it, - apply the scientific approach and become familiar with interdisciplinary issues, - reflect the teamwork and the communication within the project team, - identify and describe problems of a project related to Nutritional, Food and Consumer Sciences, and to develop proposals for solutions and convert them into action. 				
2	Content of the module <ul style="list-style-type: none"> - Project definition - Work in a project - Selection and assessment of a project topic - Project planning: goal, work schedule, milestones, finance plan - Management of the project team, roles in the team, moderation - Techniques for retrieval and evaluation of information - Good scientific practice, ethical principles, information of clients - Presentation of the project work to different audience (project, department and project partners) - Implementation of a project - Evaluation of a project - Reflection of the project work - Project completion including documentation 				
3	Teaching methods <ul style="list-style-type: none"> - 1 SWS lecture - 1 SWS exercise - 1 SWS seminar - 6 SWS project 				
4	Requirements for participation None				
5	Requirements for receiving credits Written status reports at the end of semester 4; presentation of the project work during “project fair”; final report at the end of the 5th semester; passed module examination				
6	Usability of the module Compulsory in the BSc Dietetics				
7	Examination type Portfolio examination				
8	Remarks Excursions				
9	Methods of assessment Grading				
10	Responsible for the module Study program manager				

Internship						
Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length	
OE-BS-BPS	540 hours	20	4 th to 6 th	every semester	3 semester divided in 16 weeks fulltime internship	
Module-type Compulsory			Level of the module Bachelor		Language German	
1	Qualification objectives The practical experience module is designed to guide students into the occupational profession dietetics. Students are acquainted with the use of scientific knowledge to solve problems in professional practice under teacher guidance for a designated period of time at the practise co-operation partner. They are accompanied interactively by teachers through their self-directed learning process, and their knowledge and personal skills benefit from action-oriented learning during the internship. The students are able to: - apply the technical and methodological skills gained in the course of studies at the internship and strengthen them by working on specific tasks at the practise establishment, - identify the structure and process organisation of the institution at which practical experience is gained, - reflect own capabilities and interests, - work interdisciplinary, mobile, and with support of virtual work environments, - incorporate themselves in complex tasks and operating cultures in a short time (employability).					
2	Content of the module Preparation on and companionship in the vocational field					
3	Teaching methods - 1 SWS seminar e-learning 16 weeks fulltime internship in a practise institutions which are accepted by Hochschule Fulda and co-operation partner "Diätschule"					
4	Requirements for participation All modules of the first two semesters have to be passed					
5	Requirements for receiving credits: Passed module examination					
6	Usability of the module Compulsory module in the BSc Dietetics					
7	Examination type Portfolio examination					
8	Remarks The practise institutions have to be accepted by Hochschule Fulda and the co-operation partner "Diätschule". Literature will be announced, materials will be provided on the learning platform.					
9	Methods of assessment Grading					
10	Responsible for the module Placement Officer					
Case study II to work on an empirical analytical problem						
Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length	
OE-BS-FLS II	135 hours • 72 in-class hours • 63 hours self-study	5	7 th semester	Winter semester	1 semester	
Module-type Compulsory			Level of the module Bachelor		Language German	

1	Qualification objectives The students are able to: - apply the interdisciplinary skills from academic studies in the context of a case study self-dependent - identify a practical and realistic problem related to dietetics and choose methods of evidence based practise for this dietetic problem - represent the reflection process: explain and evaluate the decision process and draw conclusions from the case study
2	Content of the module <ul style="list-style-type: none"> • Methods of Evidence Based Practise EBP • Present a problem and work on an objective target • Design and implementation of a case study in small groups • Documentation and presentation of in common developed findings • Reflection of EBP
3	Teaching methods - 4 SWS group work
4	Requirements for participation Passed module examination in Research Methods I and II
5	Requirements for receiving credits Passed module examination
6	Usability of the module Compulsory in the BSc Dietetics
7	Examination type Portfolio Examination: Represent the development process of acquired skills and findings as well as reflection of project work
8	Remarks The module is in contact to the module research methods II. Students shall work in small groups with methods of EBP on a clinical problem. The following explanatory clinical problem shall be work on: conclusion of a direct causal correlation and analysis of causal relationships (empirical analytic paradigm/quantitative research)
9	Methods of assessment Grading
10	Responsible for the module Study program manager

Fundamentals of Social Sciences					
Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-SIO	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	7 th semester	Winter semester	1 semester
Module-type Compulsory			Level of the module Bachelor		Language German

1	Qualification objectives Students should learn to understand that nutrition and food are not only physiological processes, but that these are determined by cultural, social, and psychological determinants and can be changed. The students are able to: - outline the cultural-specific characteristics of food and nutrition and to state the basics of culture-specific interventions, - outline the fundamentals in the sociology of food and nutrition, - classify the relevance lifestyle-specific foods and societal roles of food, - reflect the societal roles of Nutritional, Food and Consumer Science (Nutritional, Food and Consumer Sciences), - explain "normal" and impaired eating behaviours and to outline solution approaches to change
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	impaired eating, - describe central, psychological schools and psychological personality approaches, those of which are relevant for a future career, - explain the interrelations between psyche and eating behaviour, - deepen their competencies in social sciences independently.
2	Content of the module - Introduction to Sociology, especially in the sociology of food and nutrition - Introduction to Nutrition Psychology - Social roles and responsibility of Nutritional, Food and Consumer Sciences - Connections between nutrition and cultural sciences - Introduction to intervention methods of Nutritional, Food and Consumer Sciences
3	Teaching methods - 2 SWS lecture - 1 SWS seminar - 1 SWS exercise
4	Requirements for participation None
5	Requirements for receiving credits Regular participation in seminar, work on practical examples in exercises; passed module examination
6	Usability of the module Compulsory in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM
7	Examination type Oral examination
8	Remarks None
9	Methods of assessment Grading
10	Responsible for the module Chair of Social Sciences

Economics I: Principles of Economics

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-WI1	135 hours divided in <ul style="list-style-type: none"> 72 in-class hours 63 hours self-study 	5	7 st semester	Winter semester	1 semester
Module-type			Level of the module		Language
Compulsory			Bachelor		German

1 Qualification objectives

- Students will gain fundamental, technical, and methodological knowledge on business and Macro Economics and are able to provide solutions to simple issues relevant to Nutritional, Food and Consumer Sciences. The use of qualified teaching techniques enables the students to gain additional competencies in the fields of communication, organisation of their work processes and abilities to solve economic tasks. The students are able to:
- classify and characterise business and Macro Economics,
 - describe political and economic relations,
 - explain the organisation as a productive, social system,
 - describe the specific methods of business economics and can apply fundamental methods in simple systems,
 - classify and systemise the organisations in the food industry,
 - demonstrate knowledge and understanding the simple and expanded system of production,
 - describe and explain the fundamental goals and objectives of organisations,
 - understand and apply fundamental, operational key figures,
 - understand location decisions,

- name the legal structure of organisations and state advantages and disadvantages,
- communicate in working groups in a goal-oriented way, solve tasks and present.

2 Content of the module

- market economy, market, and society
- nature of the economy, organisations, and companies
- basic terminology of Macro Economics
- business economics as an applied science
- orientation and methods of business economics
- types of organisations, industries, and the different economic levels
- factors of production
- goals and objectives
- operational key figures
- factors of location decisions
- forms of companies

3 Teaching methods

- 2 SWS Lecture
- 2 SWS Exercise

4 Requirements for participation

None

5 Requirements for receiving credits

Work on examples in exercises in single, partner and group works; presentation of the results; passed module examination

6 Usability of the module

Compulsory in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM

7 Examination type

Written examination

8 Remarks

None

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Economics – Macro-Economics – Business Information Systems

Culture, Nutrition, Sustainability

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-KEN	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	7 th semester	Winter semester	1 semester
Module-type	Level of the module		Language		
Compulsory	Bachelor		German/ English		

1 Qualification objectives

The students are able to:

- explain the relationship between food products/ nutritional behaviour and cultural, influential factors,
- outline food patterns, which result in current nutritional behaviour,
- apply principles of historiographical research,
- explain mentalities regarding ingestion,
- identify and to some extent modify cultural factors of influence in their further professional life,
- outline the principles of lifestyle research and to analyse lifestyles,
- assess the impact of different nutritional behaviours on environment and society,
- develop goal-oriented knowledge in self-studies from the subject that is important for Nutritional, Food and Consumer Sciences.

2 Content of the module

- Culture and Nutrition
- Introduction to lifestyle research
- Health and nutritional behaviour
- Intercultural comparison of food patterns
- Definition and history of the term "sustainability"
- Impact of different nutritional behaviours on environment and society

3 Teaching methods

- 1 SWS lecture
- 1 SWS seminar
- 2 SWS exercise

4 Requirements for participation

Contents of the modules "Fundamentals of social sciences, fundamentals of nutritional and food sciences; nutrition I and II; Fundamentals of economics"

5 Requirements for receiving credits

Work on practical examples in exercises; passed module examination

6 Usability of the module

Compulsory in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM

7 Examination type

Written examination

8 Remarks

None

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Health Psychology – Nutrition Psychology – Psychotherapy

Applied Nutrition and Food Sciences

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-ELW	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	7 st semester	Winter semester	1 semester
Module-type			Level of the module		Language
Compulsory			Bachelor		German

1 Qualification objectives

The students are able to combine nutritional and food science-based findings and apply these in the vocational field dietetics especially to optimize menu planning.

The students are able to:

- perform a nutritional assessment of food constituents and to derive the appropriate use of functional or novel foods for human nutrition,
- outline the relationship between food constituents and different diseases,
- evaluate the nutritional physiological and sensory value and the application area of dietary foods
- know the physiological basis of sensory analysis,
- apply the sensory testing procedures of food and dietary foods and to evaluate the results,
- insert fundamental methods after tutorial to arrange experiments in nutritional physiology and food quality, document and evaluate the results
- use the knowledge of nutritional physiology and food science to critical reflect health-related statements
- explain further science-based dietetic problems on the fundamentals of nutritional and food science-based findings and reflect this statements critically

2 Content of the module

- Sensory analysis of food, specifically dietary food
- Food evaluation, especially aspects of nutritional physiology and sensory
- Food processing with the focus on retaining nutrients
- Analytic methods of nutritional physiology and evaluation of food quality

3 Teaching methods	- 1,5 SWS seminar - 2,5 SWS laboratory exercise Food Processing (sensory) and Nutritional Physiology
4 Requirements for participation	None, recommended: contents on the module "Fundamentals of Nutritional and Food Sciences" or comparable competences
5 Requirements for receiving credits:	Regular participation in seminar, laboratory reports; passed module examination
6 Usability of the module	Compulsory module in the BSc Dietetics
7 Examination type	Written examination
8 Remarks	None
9 Methods of assessment	Grading
10 Responsible for the module	Chair of Nutritional and Food Quality

Physical Activity and Diseases

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-ERB	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	7 th semester	Winter semester	1 semester
Module-type			Level of the module	Language	
Compulsory			Bachelor	German	

1 Qualification objectives	The students are able to <ul style="list-style-type: none"> – define physical activity and describe forms of physical activity distinguished – explain basics of determinate energy expenditure – describe objective methods of determinate physical activity and energy expenditure as well as carry out them after proper training, review and evaluate the results – describe subjective methods of determinate physical activity – apply and review validated questionnaires to determinate physical activity and evaluate results – explain relationships between physical activity and elected diseases – describe guidelines of physical activity for elected diseases
2 Content of the module	<ul style="list-style-type: none"> – terminology of physical activity – energy expenditure and its determination – basics of exercise therapy – subjective and objective methods to survey physical activity and its evaluation – physical activity and elected diseases – guidelines of physical activity and elected diseases
3 Teaching methods	- 2 SWS seminar - 2 SWS laboratory exercise
4 Requirements for participation	None
5 Requirements for receiving credits:	Regular participation in seminar, laboratory reports; passed module examination
6 Usability of the module	Compulsory module in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM

7 Examination type	Written examination
8 Remarks	None
9 Methods of assessment	Grading
10 Responsible for the module	Chair of Nutritional Physiology – Human Nutrition – Nutrition in prevention and during illnesses (ad interim)

Diet Therapy					
Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-NUD	270 hours divided in <ul style="list-style-type: none"> • 162 in-class hours • 108 hours self-study 	10	8 st semester	summer semester	1 semester
Module-type			Level of the module		Language
Compulsory			Bachelor		German
1 Qualification objectives	<p>The module enables students to address to science-based medical nutrition issues, according to national and international standards. The students are able to:</p> <ul style="list-style-type: none"> - explain the relations between nutrition, lifestyle and various diseases and to exemplarily outline goals for individuals' health, - characterise the pathophysiology of various diseases to derive dietary guidelines and concepts for nutrition counselling and physical activity and to deal with new issues, - implement screening instruments to diagnose nutritional status - implement dietetic strategies for research and treatment and conceive the individual nutritional condition and the lifestyle regarding diet-related diseases and to formulate specific problems - explain guidelines of elected diseases and implement them on case studies, develop specific nutritional concepts in accordance with guidelines - case study: evaluate dietetic therapy concepts in accordance to effectiveness and safety - explain the meaning of reflection in EBP and arrange it 				
2 Content of the module	<ul style="list-style-type: none"> - Causes, risk factors, pathophysiology and therapy of elected diseases - Changes in nutritional status - Concepts of nutrition counselling - Screening instruments and dietetic strategies for research and treatment - Guidelines for therapy of elected diseases - Methods of EBP (Evidence Based Practise) 				
3 Teaching methods	<ul style="list-style-type: none"> - 4 SWS seminar - 4 SWS Group work (case study) 				
4 Requirements for participation	None				
5 Requirements for receiving credits:	Regular participation in seminar, case study documentation including reflection, passed module examination				
6 Usability of the module	Compulsory module in the BSc Dietetics				
7 Examination type	Portfolio Examination: Represent the development process of acquired skills and findings as well as reflection of project work				
8 Remarks	Work in small groups on a case study with a descriptive clinical problem for example: What is the				

latest dietetic practise to manage a specific disease? Methods of qualitative research, survey research or clinical audit should be used.

9 Methods of assessment
Grading

10 Responsible for the module
Chair of Nutritional Physiology – Human Nutrition – Nutrition in prevention and during illnesses

Process-oriented Quality Management in Dietetics

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-PQM	135 hours divided in <ul style="list-style-type: none"> • 81 in-class hours • 54 hours self-study 	5	8 st semester	Summer semester	1 semester
Module-type			Level of the module		
Compulsory			Bachelor	Language German	

1 Qualification objectives

The module enables to work process-oriented in diet therapy and nutrition counselling
The students are able to:

- name the goals and concepts of process and quality management and to assess the benefits for companies in the food industry and health care utilisations,
- apply important methods for the analysis and optimisation of the core processes in the food industry and service organisations,
- apply important methods of quality management,
- use the PDCA (Plan-Do-Check-Act) Cycle for the continuous improvement process,
- demonstrate the implementation and evaluation of a process-based quality management system in service organisations,
- apply methods of implementing the International Feature Standard (Food)
- develop, implement and evaluate processes-oriented action (Nutrition Care Process) in the diet therapy and nutrition counselling in consideration of Clinical Reasoning

2 Content of the module

- process-oriented Quality Management
- procedural method and benedit of process-oriented quality management for companies/organisations
- terms and definitions of quality, concepts of quality management
- methods and procedure of quality management
- implementation and evaluation of quality management systems
- HACCP
- International Featured Standard, Food
- Retraceability
- Nutrition Care Process
- Clinical Reasoning

3 Teaching methods

- 2,5 SWS lecture
- 2 SWS exercise

4 Requirements for participation

None

5 Requirements for receiving credits:

Work on exercises; passed module examination

6 Usability of the module

Compulsory module in the BSc Dietetics

7 Examination type

Written examination

8 Remarks

Guest lectures of representatives from professional practice, exercises supervised by various experts; the examination is mainly composed of questions with knowledge transfer

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Food Business – Chemistry – Food Chemistry – Quality Management

Nutrition Epidemiology and Nutrition Status

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-EPi	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	8 st semester	summer semester	1 semester
Module-type Compulsory			Level of the module Bachelor		Language German

1 Qualification objectives

The students are able to:

- explain study design and collection method of nutritional epidemiology
- classify epidemiological measures and calculate descriptive dimensions
- appoint and use resources of descriptive-epidemiological measures
- interpret results of epidemiological studies
- apply standardised nutrition form-sheets and interpret these results
- arrange a screening for malnutrition in a setting
- classify biomarker and interpret laboratory data
- apply measuring methods to register and evaluate nutritional status

2 Content of the module

- study designs, collection methods and assessment strategies of nutritional epidemiology
- epidemiological measures
- evidence-basing
- biomarker
- parameters and methods to evaluate nutritional status

3 Teaching methods

- 2 SWS seminar
- 1,5 SWS laboratory exercise

4 Requirements for participation

None

5 Requirements for receiving credits:

Regular participation in seminar, Laboratory report; passed module examination

6 Usability of the module

Compulsory module in the BSc Dietetics

7 Examination type

Oral examination

8 Remarks

None

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Nutritional Epidemiology – Preventive Strategies

Health Care Management

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-GHM	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	9 th semester	Winter semester	1 semester
Module-type			Level of the module		Language
Compulsory			Bachelor		German
1	The students are able to: <ul style="list-style-type: none"> - explain the legal and institutional framework of health care provision in Germany, - explain structural features, structural principles, operating modes, organisation and financing forms of the health care provision system in the statutory health insurance and social long-term care insurance, - critically reflect relevant legal relations in the health care system, particularly in the area of patient and service law and in the field of service contracts between providers of services and payers, - to be aware of basic issues and methods in health economics that can be used to analyse economic problems in the national health care system contribute to an international background. 				
2	Content of the module <ul style="list-style-type: none"> - Structure, organisation and financing of the German statutory health insurance (Gesetzlichen Krankenversicherung (GKV)) - Private health insurance (Privaten Krankenversicherung (PKV)) and social nursing care insurance (Sozialen Pflegeversicherung (SPV)) - Market failure in markets for health goods and health insurances - Overuse, underuse, and misuse of structures of health care in Germany - Social security legal frameworks for the development of new health care provision schemes in Germany, including sector-, organisation-, and profession-wide health care deficits - Application of applied international health care concepts to the German health care provision context in an international comparison based on the concepts of managed care, case management, clinical pathways, etc. - Lighthouse projects of new health care provision schemes in Germany: disease management programs, integrated health care, gatekeeper-based medical care, medical care centres 				
3	Teaching methods <ul style="list-style-type: none"> - 2 SWS seminar - 2 SWS exercises 				
4	Requirements for participation None				
5	Requirements for receiving credits Regular participation in seminar, work on practical examples in exercises; passed module examination				
6	Usability of the module Compulsory module in the BSc Dietetics, optional compulsory module for the specialisation Nutrition and Health in the BSc Oe:EGL; elective module for the other specialisations and in the BSc Oe:VVM				
7	Examination type Oral examination				
8	Remarks None				
9	Methods of assessment Grading				
10	Responsible for the module Chair of Health Technology Assessment and Health System Design (Faculty Nursing and Health Sciences)				

Dietary Counselling

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-ERB	135 hours divided in <ul style="list-style-type: none">• 72 in-class hours• 63 hours self-study	5	9 st semester	Winter semester	1 semester

Module-type	Level of the module	Language
Compulsory	Bachelor	German

1 Qualification objectives

The module enables students for the Dietary Counselling of Individuals (patients and their relatives) in clinical dietetics for secondary and tertiary prevention in inpatient and outpatient medical care.

The students are able to

- transfer methods of counselling and behavioural change in consideration of social situations into practise and evaluate them
- identify specific problems in the nutrition counselling
- design the counselling process in difficult situations
- integrate the meaning of specific counselling aspects for example motivation and empathy
- reflect the role of the counsellor
- develop media suitable for the target group and prove the effectiveness
- arrange and analyse the evaluation of nutrition counselling at the level of process and outcome
- reflect the counselling process concerning to Clinical Reasoning

2 Content of the module

- nutrition and behavioural research, changing lifestyles
- Diversity management
- Elective types of counselling and behavioural change
- Quality criteria of good counselling
- Clinical Reasoning
- develop media suitable for the target group
- reflection of role plays in the nutrition counselling
- clinical supervision
- evaluation of nutrition counselling

3 Teaching methods

- 2 SWS seminar
- 2 SWS exercise

4 Requirements for participation

None, recommended: study material of the module Fundamentals of Communication and Counselling

5 Requirements for receiving credits:

Work on exercises; passed module examination

6 Usability of the module

Compulsory module in the BSc Dietetics

7 Examination type

Oral examination

8 Remarks

None

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Health Psychology – Nutrition Psychology – Psychotherapy

Clinical Nutrition and Pharmacy

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-KEP	135 hours divided in <ul style="list-style-type: none"> • 54 in-class hours • 81 hours self-study 	5	9 th semester	Winter semester	1 semester
Module-type				Level of the module	Language
Compulsory				Bachelor	German
1	Qualification objectives				
	The module enables students to take science-based action in clinical nutrition in accordance with national and international standards. The students are able to:				
	<ul style="list-style-type: none"> - describe disorders of food intake, pathophysiological processes of the gastrointestinal tract, as well as liver, pancreas and kidneys and to develop the use of complementary feeding as part of therapy in nursing homes and home care, - develop suggestions about the type of clinical nutrition based on existing, individual nutritional problems, - outline advantages and disadvantages of tube feeding and parenteral nutrition, - use the guidelines for enteral and parenteral nutrition - identify problems in the practical implementation of enteral or parenteral nutrition therapy and to develop solutions, - evaluate implemented nutritional measures, - see own actions from a critical distance and reflect solutions - declare pharmacological basics and explain relevant examples from pharmacotherapy - describe interactions between pharmaceuticals and food/food intake 				
2	Content of the module				
	State of research and current issues in clinical nutrition				
	<ul style="list-style-type: none"> - introduction in the International Classification of Diseases - Diseases that go hand in hand with eating disorders and disorders of the gastrointestinal tract, liver, pancreas and kidneys and intervention measures - Post-aggression metabolism - Implementation of nutrition standards in malnutrition - Implementation of nutrition standards and nutritional path - enteral and parenteral nutrition 				
3	Teaching methods				
	- 3 SWS seminar				
4	Requirements for participation				
	None, recommended: Module contents of the module Diet Therapy				
5	Requirements for receiving credits				
	Regular participation in seminar, passed module examination				
6	Usability of the module				
	Compulsory module in the BSc Dietetics				
7	Examination type				
	Oral examination				
8	Remarks				
	Guest lectures; Excursion to a stationary facility				
9	Methods of assessment				
	Grading				
10	Responsible for the module				
	Chair of Nutritional Physiology – Human Nutrition – Nutrition in Prevention and in Diseases				

Nutrition and Ethical Questions

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-EE	135 hours divided in <ul style="list-style-type: none"> • 54 in-class hours • 81 hours self-study 	5	9 th semester	Winter semester	1 semester
Module-type Compulsory			Level of the module Bachelor		Language German
1 Qualification objectives					
The students are able to					
<ul style="list-style-type: none"> - define the term “ethic” and integrate it in the field dietetics - explain the medical ethics as an important aspect of diet therapy - explain human dignity and quality of life - integrate the term “health” and the assessment of health in consideration of quality of life - contrast length of life with quality of life - outline important ethic problem areas - describe the tasks of an clinical ethical review committee - describe and apply guidelines to frequently ethical questions in hospitals - describe ethical conflicts at the work with patients and discuss ethical maintainable approaches - identify ethical borderlines in contact with patients 					
2 Content of the module					
<ul style="list-style-type: none"> - End of Life Care - Palliative Care and the role of dietetics - Patients provision - Quality of life and instruments to measure quality of life - History of medical ethics - Ethical problem fields in hospital in consideration of dietetics for example ethic aspects of parenteral nutrition and fluid supply - Examples of ethical conflicts in dietetics 					
3 Teaching methods					
- 3 SWS seminar					
4 Requirements for participation					
None					
5 Requirements for receiving credits					
Passed module examination					
6 Usability of the module					
Compulsory module in the BSc Dietetics, Elective Module in the BSc Oe:EGL					
7 Examination type					
Oral examination					
8 Remarks					
Guest lectures; Excursion to a stationary facility with clinical ethic counselling, Excursion to presentations to the issue ethics					
9 Methods of assessment Grading					
10 Responsible for the module					
Chair of Nutritional Physiology – Human Nutrition – Nutrition in Prevention and in Diseases					

Bachelor Thesis

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-BSC	<ul style="list-style-type: none"> • 270 hours • 270 hours self-study 	10	9 th semester	Every semester	1 semester
Module-type Compulsory			Level of the module Bachelor		Language German/ English

1 Qualification objectives	Using a science-based approach, the students work independently within a specified time period on a problem from their chosen profile in Nutritional, Food and Consumer Sciences. Interdisciplinary aspects of this process are of particular importance. The students are able to: <ul style="list-style-type: none"> - apply the rules of good scientific practice, - do own scientific research question and to formulate a objective of the work, - choose appropriate methods to work on the topic and to explain it in a comprehensible way, - conduct a literature research and to use specialised literature in German and English , - document and to assess the findings systemically, - discuss and to interpret the findings and to deduce conclusions for theory and practice.
2 Content of the module	<ul style="list-style-type: none"> - Finding topics and posing questions - Research design and selection of methods - Empirical and theoretical work - Presentation of results from a scientific viewpoint - Implications for practice and theory
3 Teaching methods	None
4 Requirements for participation	Formal: The vocational education "Diätassistentenz" has to be passed successfully. Not more than one module examination from the preceding 8 semesters may be missing.
5 Requirements for receiving credits	Passed module examination
6 Usability of the module	Compulsory in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM
7 Examination type	Written paper, a colloquium based on that paper
8 Remarks	None
9 Methods of assessment	Grading
10 Responsible for the module	Study Program manager

Elective modules

Nutritional Education and Counselling					
Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-ERB	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	8 th semester	Summer semester	1 semester
Module-type			Level of the module		Language
Elective			Bachelor		German
1 Qualification objectives	The students are able to: <ul style="list-style-type: none"> - outline individual, institutional and social conditions for lifelong learning and to describe consequences for nutritional education, - define nutritional education and lifelong learning and to appropriate different training measures, - organise nutritional education processes for various education groups and settings, - implement nutritional education into „food literacy“ considering „diversity management“, - methodically and didactically conceptualise an educational package for target groups. 				
2 Content of the module	<ul style="list-style-type: none"> - Frameworks for lifelong learning 				

- Individual learning concepts
 - Methodology and didactics in lifelong learning for various target groups
 - Selected didactic concepts
 - Concepts of intervention in nutritional education
 - Diversity management
 - Reflection of own conception
 - Forms of evaluation
-

3 Teaching methods

- 2 SWS seminar
 - 2 SWS exercises
-

4 Requirements for participation

Study material of the module Fundamentals of Communication and Counselling

5 Requirements for receiving credits

Regular participation in seminar, work on practical examples in exercises; passed module examination

6 Usability of the module

Elective module for BSc Dietetics, optional compulsory module for the specialisation Nutrition and Health in the BSc Oe:EGL; elective module for the other specialisations in the BSc Oe:VVM

7 Examination type

Oral examination

8 Remarks

Presentation for exercise

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Socio-Ecology of Private Households – Management in Private Households – Ecology of Living – Consumer Protection

Nutrition, Food, Globalisation

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-ELG	135 hours divided in <ul style="list-style-type: none"> • 81 in-class hours • 54 hours self-study 	5	8 th semester	Summer semester	1 semester
Module-type Elective			Level of the module Bachelor		Language German
1	Qualification objectives The module enables students to understand and to assess the complex relationship between nutrition, food production and global aspects and, thus, to work on solutions for current and future global challenges. The students are able to: <ul style="list-style-type: none"> - define and to systemise nutritional problems in newly industrialised and developing countries; - identify the mutual influence of malnutrition and infectious diseases, evaluate their consequences and to implement the findings in the planning of intervention measures; - analyse the reasons and consequences of health and nutrition transition and to consider them when planning intervention measures; - place health and nutritional problems in the context of sustainable development; - explain basic theories and approaches of emergency relief, prevention of hunger and security of food supply and assess their advantages and disadvantages; - draw up concepts for measures to secure food supply, to eliminate malnutrition and to prevent chronic diseases; - name most important global players and organisations in the field of nutrition, food and development; - discuss current development policy issues and problems regarding sustainability; - explain the frameworks of global food systems and to estimate their relevance regarding measures of the global security of food supply. 				
2	Content of the module Current problems and future challenges <ul style="list-style-type: none"> - Nutrition and health in a global context - Health and nutrition transition - Hunger, opulence, development, sustainability - Global economy, world food policy and world agricultural policy (Codex Alimentarius; terms of trade) Solution approaches <ul style="list-style-type: none"> - Concepts of (development) policy and sustainability - Intervention approaches of food, economic and social policy - Current practical examples 				
3	Teaching methods <ul style="list-style-type: none"> - 3 SWS seminar 				
4	Requirements for participation None				
5	Requirements for receiving credits Regular participation in seminar, passed module examination; work on exercises; presentation; work with English literature				
6	Usability of the module Elective module for BSc Dietetics, Compulsory in the BSc Oe: EGL and BSc Oe: VVM for all specialisations				
7	Examination type Written examination				
8	Remarks Guest lectures				
9	Methods of assessment Grading				
10	Responsible for the module Chair of Nutritional Epidemiology – Preventive Strategies in Nutrition				

Product Development

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length	
OE-BS-PEW	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	8 th semester	Summer semester	1 semester	
Module-type			Level of the module			Language
Elective			Bachelor			German
1	Qualification objectives					
	The students are able to: <ul style="list-style-type: none"> - explain the stages of product development, - apply sensory and nutritional physiological quality criteria and food regulatory standards in the development of new products, - apply methods for sensory evaluation of food and for determining the shelf life, - apply sustainability criteria for product development, - work in teams and present the results. 					
2	Content of the module					
	<ul style="list-style-type: none"> - The importance of product development, product development phases - Sensory, nutritional and food regulatory aspects of product development - Procedures for determining the shelf-life 					
3	Teaching methods					
	<ul style="list-style-type: none"> - 2 SWS seminar - 2 SWS project work 					
4	Requirements for participation					
	Contents of the module Food Science I					
5	Requirements for receiving credits					
	Passed module examination (project work for the written report)					
6	Usability of the module					
	Elective in the BSc Dietetics, compulsory for the specialisation Food Business in the BSc Oe:EGL, elective module for the other specialisations in the BSc Oe:EGL; elective module in the BSc Oe:VVM					
7	Examination type					
	Written examination					
8	Remarks					
	None					
9	Methods of assessment					
	Grading					
10	Responsible for the module					
	Chair of Nutrition Quality – Food Quality					

Consumer Protection and Consumer Education

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length	
OE-BS-VBL	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	8 th semester	Summer semester	1 semester	
Module-type			Level of the module			Language
Elective			Bachelor			German
1	Qualification objectives					
	The students are able to: <ul style="list-style-type: none"> - assess the position of consumers in the European internal market and in Germany die Position, - explain the historical development of consumer policy and consumer protection bodies at the 					

- European and German level,
- outline the basic features of the current consumer policy at national and European level,
 - differentiate between consumer education, advice, and information and to provide different examples from European and German levels,
 - describe the behaviour of different consumer groups,
 - plan consumer education training for different groups of consumers at a project-based level.

2 Content of the module

- Historical development of consumer policy and consumer protection bodies at the European and German levels
- Current consumer policy of the federal government and states
- Position of consumers in the European internal market and the market system of Germany
- Consumer behaviour and influencing factors
- Targeted consumer education, counselling activities, and information measures
- Evaluation methods

3 Teaching methods

- 2 SWS seminar
- 2 SWS project

4 Requirements for participation

Contents of the modules Legislation and Fundamentals of Communication and Counselling

5 Requirements for receiving credits

Completion of a consumer education project; passed module examination

6 Usability of the module

Elective in the BSc Dietetics, compulsory for the specialisation Nutrition and Health in the BSc Oe:EGL and for the profile Supply Management in the BSc OE:VVM; elective module for the other specialisations in the BSc OE:EGL and for the profile Supply Management in the BSc Oe:VVM

7 Examination type

Oral examination

8 Remarks

English study material

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Socio-Ecology of Private Households – Management in Private Households – Ecology of Living – Consumer Protection

European Studies (European Module)

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-IN2	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	8 th semester	Summer semester	1 semester
Module-type			Level of the module		Language
Elective			Bachelor		German

1 Qualification objectives

The students are able to:

- develop insights and critical reflection ability on the European integration process within the EU,
- assess career-relevant European developments,
- assess EU-funding and their objectives and to discuss offers,
- plan/structure the process of an application and specifically apply support measures.

2 Content of the module

(I) European law:

The success of the European Union also explains the fact that it is a community based on law. This part of the course will present the roles of the law within the European Union. This will be discussed at the beginning of Fundamentals of International Law and also the development of the founding treaties, including the Treaty of Lisbon.

Topics include the EU institutions and legislation in relation to the Member States and the judicial protection. The content will be developed on a case related to course-related examples, including internal market legislation, the basic liberties, and consumer rights.

(II) EU and professional world:
EU-Funding and programme

3 Teaching methods	- 4 SWS seminar
4 Requirements for participation	None
5 Requirements for receiving credits	Presentation; passed module examination
6 Usability of the module	Elective module for all Bachelor degree courses
7 Examination type	Written examination
8 Remarks	None
9 Methods of assessment	Grading
10 Responsible for the module	Chair of the Law of Technical Development (Department of Social- and Cultural Studies)

Economics II: Business Administration

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-WI2	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	8 th semester	Summer semester	1 semester
Module-type	Level of the module		Language		
Elective	Bachelor		German/ English		

1 Qualification objectives

The students gain fundamental subject-specific and methodological knowledge in the field of Business Administration and are able to apply this knowledge in economic practice.

The students are able to:

- state the tasks of leadership and management,
- understand the decision-making in an operation and can comprehend and explain the decisions,
- identify and to solve target conflicts within the operational system,
- name the main features of the organisation of operations (organisational and operational structure),
- explain the fundamentals of production management, materials management and logistics and to adapt them in practical examples,
- understand the tasks of human resource management and to adapt them in practical examples,
- understand the relationship between investment and financing,
- explain the information-gathering of the business in the main features in its fundamentals,
- explain the specifics of an operation in the food industry,
- outline the aspects of international and intercultural business operation,
- develop economic decision making in work teams, to analyse their impacts and to adjust new scopes.

2 Content of the module

- Leadership and management tasks, management styles
- International business operation
- Decision process in an operation
- Operational functions:
 - Organisation (organisational and operational structure)

	<ul style="list-style-type: none"> • Materials Management • Production and Services • Sales • Human resource management • Accounting and Financing • Information gathering <p>- Characteristics of an operation in the food industry</p>
3	Teaching methods - 2 SWS lecture - 2 SWS exercise
4	Requirements for participation Contents of the module Principles of Economics
5	Requirements for receiving credits Work on examples in exercises (individually, in pairs or groups); presentation of the results; passed Module examination.
6	Usability of the module Elective in the BSc Dietetics, compulsory in the BSc Oe:EGL and BSc Oe:VVM.
7	Examination type Written examination
8	Remarks None
9	Methods of assessment Grading
10	Responsible for the module: Chair of Economics – Macro Economics – Business Information Systems

Human Resources Management

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-PMT	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	8 th semester	Summer semester	1 semester
Module-type			Level of the module		Language
Elective			Bachelor		German

1	<p>Qualification objectives</p> <p>The students can apply the instruments of human resource managements and can analyse and assess current challenges. They can develop and take measures to solve problems and evaluate their success. The students are able to:</p> <ul style="list-style-type: none"> - individually realise human resource planning, - plan and to apply personnel development measures and personnel assessment techniques, - apply instruments of personnel procurement and personnel layoff, - apply measures of human resource management, - develop human resource management decisions in work teams, to analyse their effects and to adjust new tasks.
2	<p>Content of the module</p> <ul style="list-style-type: none"> - Human resource planning - Personnel procurement - Human resource development - Human resource management - Personnel remuneration - Personnel assessment - Personnel controlling - Personnel motivation - International placement of personnel

3 Teaching methods

- 2 SWS seminar
- 2 SWS exercise

4 Requirements for participation

Contents of all of the modules Principles of Economics, Economics II and Legislation (recommended)

5 Requirements for receiving credits

Regular participation in seminar, work on examples in exercises (individually, in pairs or groups); presentation of the results; passed module examination.

6 Usability of the module

Elective in the BSc Dietetics, compulsory for the specialisation Food Business in the BSc Oe EGL and for the profile Supply Management in the BSc Oe:VVM; elective module for the profile Supply Management in the BSc Oe:VVM; elective module in the BSc Oe:EGL

7 Examination type

Oral examination

8 Remarks

Especially important for this module is teamwork, time management and the reflexion of group processes.

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Economics – Macro Economics – Business Information Systems

By vocational education “Diätassistentz” recognized modules

Fundamentals of Nutritional and Food Sciences					
Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-CBI	270 hours divided in <ul style="list-style-type: none"> • 162 in-class hours • 108 hours self-study 	10	1 st semester	Winter semester	1 semester
Module-type			Level of the module		Language
Compulsory			Bachelor		German

1 Qualification objectives

The students are able to:

- apply the fundamentals of biology, biochemistry and chemistry, which are significant for the understanding of the biological system relevant to food, nutritional and environmental sciences,
- appropriately apply the periodic system of chemical elements and comprehend nature as a material world,
- become familiar with important chemical compounds and understand important chemical reactions,
- understand important analytical procedures,
- understand the biological and chemical processes important for the human body and the primary production and material cycles in the environment, including those for the production and processing of food products,
- develop goal-oriented knowledge in self-studies and project work from the subject literature related to biology (including raw material science), biochemistry and chemistry, which is important for Nutritional, Food and Consumer Sciences,
- apply the acquired knowledge in solving simple problems, which are related to the biological system and raw materials introduced in the basic studies.

After participation in the laboratory exercises, students can:

- Perform laboratory work following essential safety requirements,
- Independently prepare and conduct experiments and experimental procedures using the taught techniques,
- Observe, estimate, record and interpret results.

2 Content of the module

- Atomic structure and chemical bonds
- Application of the law of mass action; properties and reactions of acids and bases
- Basic chemical reactions (redox reactions, reactions of organic compounds)
- Chemical classes in organic chemistry; optical activity
- Structure and characteristics of biological macromolecules: carbohydrate, lipids, nucleic acids, proteins
- Function of proteins (overview, structure-functions relationship on the basis of examples)
- Flow of the genetic information: replication, transcription, translation.
- Introduction in the energy metabolism: glycolysis, citrate cycle, electron transport and oxidative phosphorylation
- Fundamentals of signal transduction; hormones
- Fundamentals of biochemical methods: protein isolation, protein characterisation, enzyme kinetics. Basic laboratory techniques; laboratory safety requirements
- Fundamentals of analysis and selected methods when examining food products
- Cells and cellular processes, tissue
- Material and energy balance in the ecosystem
- Biological fundamentals of the production of plant foods
- Biological fundamentals of the production of animal foods

3 Teaching methods

- 6,75 SWS lecture
- 1 SWS exercises (only degree programme BSc Oe:VVM)
- 2,25 SWS laboratory exercises Chemistry and Biology (only degree programme BSc Oe:EGL)
- 2 SWS laboratory exercises Chemistry and Biology (only degree programme BSc Oe:VVM)

4 Requirements for participation

None

5 Requirements for receiving credits

Laboratory report; passed module examination

6 Usability of the module

Compulsory in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM

7 Examination type

Written examination

8 Remarks

None

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Nutritional and Food Quality

Nutritional Sciences I – Nutritional Physiology (Admission without laboratory exercise)

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-EPH	135 hours divided in <ul style="list-style-type: none">• 90 in-class hours• 45 hours self-study	5	1 st semester	Winter semester	1 semester
Module-type			Level of the module		Language
Compulsory			Bachelor		German

1 Qualification objectives

The module enables students to science-based thinking and to use basics of the human biology regarding Nutritional, Food and Consumer Sciences (Nutritional, Food and Consumer Sciences). The main emphasis is on the development of an understanding of anatomy and of physiological processes particular in the gastrointestinal tract. The students are able to:

- describe the anatomy and physiology of various organ systems (e.g. cardiovascular system),
- describe the macro- and microanatomy of the gastrointestinal tract and to establish connections between specific functions,

- explain the processes of digestion and resorption of nutrients in detail,
- outline the fundamental principles of metabolism control and coordination,
- interpret exemplary pathophysiological processes,
- apply fundamental laboratory methods and to execute and to document experiments according to operating instructions and to evaluate the findings,
- use the knowledge of nutritional physiology to critical reflect health-related statements.

2 Content of the module

Anatomy and physiology of selected organ systems

- Gastrointestinal tract as a functional unit
- Digestion and reabsorption of nutrients
- Microbiological colonisation of the gastrointestinal tracts
- Biological information transmission and information processing
- Sensory perception smell and taste
- Examples of the effects on malfunctions on single organ systems as well as on the whole organism

3 Teaching methods

- 1 SWS lecture Anatomy/Physiology
- 2 SWS lecture Nutritional Physiology
- 2 SWS laboratory exercise Nutritional Physiology or Anatomy

4 Requirements for participation

None

5 Requirements for receiving credits:

Laboratory reports (Anatomy/Physiology or Nutritional Physiology); passed module examination

6 Usability of the module

Compulsory module in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM

7 Examination type

Written examination

8 Remarks

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Nutritional Physiology – Human Nutrition – Nutrition in prevention and during illnesses

Food Science I: Processed Food Products (Admission without laboratory exercise)

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-LMB	135 hours divided in <ul style="list-style-type: none"> • 81 in-class hours • 54 hours self-study 	5	2 nd semester	Summer semester	1 semester
Module-type			Level of the module		Language
Compulsory			Bachelor		German

1 Qualification objectives

The students are able to:

- outline the criteria for the evaluation of the quality of processed food products,
- name the fundamental processes of food processing,
- explain the chemical composition of food, the changes due to processing and storage, including the effects of additives,
- know the physiological basis of sensory analysis,
- apply the sensory testing procedures and to evaluate the results,
- expand their knowledge in food sciences in self-studies and project work in groups, using pertinent literature ,
- apply the knowledge to the evaluation of food quality, for example in product development and quality management.

2 Content of the module

- Properties of lipids, proteins, carbohydrates, vitamins, minerals, secondary plant materials in food products; chemical and microbiological changes; roles of enzymes in food products; production and application of aromatic substances in food products; application and properties of food additives
- Sensory analyses – Relevance and requirements, fundamental physiological senses associated with food sensory evaluation, sensory test procedures, evaluation of results
- Principles of the manufacturing of selected food products.

3 Teaching methods

- 3 SWS lecture
- 1,5 SWS laboratory exercise
- 1 SWS exercise

4 Requirements for participation

Recommended: Contents of the module “Fundamentals of Nutritional and Food Sciences”

5 Requirements for receiving credits

Laboratory report; passed module examination

6 Usability of the module

Compulsory in the BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM

7 Examination type

Written examination

8 Remarks

None

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Microbiology – Food technology

Nutrition III: Preventive Nutrition (Admission without laboratory exercise)

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-PVE	135 hours divided in <ul style="list-style-type: none"> • 81 in-class hours • 54 hours self-study 	5	4 th semester	Summer semester	1 semester
Module-type Compulsory			Level of the module Bachelor		Language German

1 Qualification objectives

The module enables students to take science-based action in the human diet in accordance with national and international standards. The students recognise the various life cycles and various population groups of critical micronutrients and can develop individual nutrition concepts to provide a safe nutrient demand. The technical competence also comprises an in-depth knowledge of the metabolism of individual micronutrients and their needs, including the supply situation in various stages of people’s lives. The students are able to:

- critically reflect on national and international nutrition recommendations,
- understand the parameters for identification of the nutrition status, to conduct quantitative analyses according to instruction, to critically scrutinise achieved measured values and to assess their relevance,
- derive possibilities of nutrition- and lifestyle-related prevention in different stages of life (e.g. pregnancy, infancy, childhood, seniority),
- develop nutrition concepts for different stages of life and different population groups to guarantee an adequate diet and nutrient supply,
- name critical micronutrients and their physiological function, to derive the effects of malnutrition and develop possibilities to remedy the defect,
- create individual nutrition plans for the prevention of malnutrition and malnourishment based on the supply situation.

2 Content of the module

- Introduction to micronutrients and recommendations of national and international scientific

	committees - Possibilities of nutrition- and lifestyle-related prevention in various stages of life - Micronutrients in the age-specific nutrition and prevention of malnutrition and malnourishment - Parameters and methods for assessing nutritional status - Critical nutrients and supply situation in Germany - Food in prevention of illnesses and malnourishment
3	Teaching methods - 3 SWS seminar - 1,5 SWS laboratory exercises
4	Requirements for participation Contents of the module Human Nutrition
5	Requirements for receiving credits Laboratory report, presentation, written report; passed module examination
6	Usability of the module Compulsory in BSc Dietetics, compulsory for the specialisation in Nutrition and Health of the BSc Oe:EGL, elective module for other specialisations; elective module in the BSc Oe:VVM
7	Examination type Written examination; passed module examination
8	Remarks None
9	Methods of assessment Grading
10	Responsible for the module Chair of Nutritional Epidemiology – Preventive Strategies in Nutrition

Nutrition II – Human Nutrition

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-HME	135 hours divided in <ul style="list-style-type: none"> • 58 in-class hours • 77 hours self-study 	5	3 rd semester	Winter semester	1 semester
Module-type			Level of the module		Language
Compulsory			Bachelor		German
1	Qualification objectives				
	The module qualifies students to take science-based action in human nutrition in accordance with national and international standards. The students are able to: <ul style="list-style-type: none"> - characterise the energy balance and metabolism of major nutrients and deduce consequences for the nutritional status, - explain the basic biochemical processes involved in nutrition, - apply dietary reference values for nutrient intakes and to characterise studies on the current supply situation of energy and nutrients, - realise nutrition surveys and to name specific problems, - analyse nutritional protocols using current nutritional software; to apply nutritional reference values with their health-related targets and optimise nutrition plans, - identify and to name problems with the supply of energy, food and nutrients and develop solutions for nutrient management, - recognise their design options and their responsibility in food systems and in product development (technical ethics). 				
2	Content of the module				
	<ul style="list-style-type: none"> - nutritional biochemistry: biosynthesis and degradation of carbohydrates fatty acids and amino acids biosynthesis of cholesterol - hormonal, neural, and endocrine regulation of food intake - body composition and nutritional status - nutrient recommendations of national and international scientific committees - energy and water homeostasis 				

- fibre
- metabolism of carbohydrates, lipids, and proteins, as well as consequences of an excessive or decreased supply
- nutrition surveys and use of nutrition software

3 Teaching methods

- 1,5 SWS lecture Fundamentals of Biochemistry
- 2 SWS lecture Nutrition Physiology
- 1 SWS laboratory exercises Nutrition Surveys

4 Requirements for participation

Contents of the module Fundamentals of Nutritional and Food Sciences

5 Requirements for receiving credits

Written documentation, analysis and evaluation of nutrient protocols; passed module examination

6 Usability of the module

Compulsory in BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM

7 Examination type

Written examination

8 Remarks

None

9 Methods of assessment

Grading

10 Responsible for the module

Chair of Nutritional Physiology – Human Nutrition – Nutrition in Prevention and in Disease

Food Science II: Food Safety and Microbiology

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-LSM	135 hours divided in <ul style="list-style-type: none"> • 81 in-class hours • 54 hours self-study 	5	3 rd semester	Winter semester	1 semester

Module-type	Level of the module	Language
Compulsory	Bachelor	German

1 Qualification objectives

The students are able to:

- characterise the hazards and adverse effects resulting from contamination of food by toxins, residues, and micro-organisms, as well as the principles of risk management at various stages of the food chain,
- apply the acquired knowledge and skills to the control of hazards in the commercial and household-scale processing of food (e.g. by design of appropriate control plans and measures), and to the preservation of food,
- independently acquire knowledge they need from literature in order to deal with problems in the fields of microbiology and hygiene which are important for Nutritional, Food and Consumer Sciences,
- apply the major microbiological methods and safety regulations for microbiological laboratories understand the theoretical background to the methods,
- name the most important hygiene regulations, to outline them and to work independently on problems.

2 Content of the module

- undesirable substances in foods
- micro-organisms and their importance for nutrition, food, environment
- visualisation, growth, metabolic activity, and discrimination of microorganisms relevant to food hygiene
- multiplication and inactivation of microorganisms
- interactions between micro- and macro-organisms (human, animal, plant)
- Basic concepts and legal framework of food hygiene; characteristics of foodborne hazards that

may be caused by food; approach to risk assessment and risk control; preventive measures in operations and households, strategies in risk assessment and risk management

3	Teaching methods - 2 SWS lecture - 1,5 SWS laboratory exercise - 1 SWS exercise
4	Requirements for participation Contents of the module fundamentals of Nutritional and Food Sciences
5	Requirements for receiving credits Laboratory report, work on examples in exercises, passed module examination
6	Usability of the module Compulsory in the BSc Dietetics, BSc Oe:EGL, BSc Oe:VVM
7	Examination type Written examination; passed module examination
8	Remarks None
9	Methods of assessment Grading
10	Responsible for the module Chair of Microbiology – Food Technology

Fundamentals of Communication and Counselling

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-KUB	135 hours divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	3 rd semester	Winter semester	1 semester
Module-type			Level of the module	Language	
Compulsory			Bachelor	German	
1	Qualification objectives The students are able to: <ul style="list-style-type: none"> - explain principle communication theories, - analyse their own communication behaviour in the context with others, - identify and to develop specific communication structures at future working places, - appropriately apply the fundamentals of counselling techniques, - explain different kinds of interventions in nutritional education and counselling (clarification, education, prevention, health promotion, training, therapy, rehabilitation), - implement interventions for nutritional education and counselling, - educate oneself further in nutritional education and counselling, - act setting-related and target-group-specific in counselling, - critical reflect and to develop further their own communication behaviour. 				
2	Content of the module <ul style="list-style-type: none"> - Communication theories - Communication in counselling, marketing and public relations - Counselling psychology - Interventions and effects: from clarification through to therapy 				
3	Teaching methods <ul style="list-style-type: none"> - 2 SWS lecture - 2 SWS exercise 				
4	Requirements for participation None				
5	Requirements for receiving credits Work on practical examples in exercises; passed module examination				

6 Usability of the module	Compulsory in BSc Dietetics, BSc Oe:EGL and BSc Oe:VVM.
7 Examination type	Oral examination
8 Remarks	None
9 Methods of assessment	Grading
10 Responsible for the module	Chair of Health Psychology – Nutrition Psychology – Psychotherapy

Food Hygiene and Technology in Catering and Private Households

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-LSI	135 hours divided in <ul style="list-style-type: none"> • 81 in-class hours • 54 hours Self-study 	5	3 rd semester	Winter semester	1 semester

Module-type	Level of the module	Language
Compulsory	Bachelor	German

1 Qualification objectives	The students are able to: <ul style="list-style-type: none"> - explain basic operations in the preparation of foods, to understand their theoretical fundamentals and to apply them practically, - outline the possible risks and adverse impacts that may arise from adverse substances and microorganisms in food and water, as well as to explain the principles to govern how and at what levels these are hazardous, - apply the acquired knowledge in the identification and control of hazards in catering (e.g. creation of hygiene and control plans), - expand their knowledge in food sciences in self-studies and project work in groups, using pertinent literature of importance for large kitchens and kitchens in private households, - apply the most important microbiological methods used to examine the hygiene status.
2 Content of the module	<ul style="list-style-type: none"> - Basic operations of food preparation - Changes in foods during production - Microorganisms in foods: growth, inactivation, detection, quantification and identification - Hygiene management in large kitchens, including kitchens in private households; hygienic design
3 Teaching methods	<ul style="list-style-type: none"> - 2 SWS lectures - 1 SWS exercise - 1,5 SWS laboratory exercise
4 Requirements for participation	Recommended: Contents of the modules Fundamentals of Nutritional and Food Sciences, Food Science I and Technology I
5 Requirements for receiving credits	Written documentation of the results of the laboratory exercise; Work on practical examples in exercises; passed module examination
6 Usability of the module	Compulsory in the BSc Dietetics and BSc Oe:VVM
7 Examination type	Written examination
8 Remarks	None
9 Methods of assessment	

10 Responsible for the module
Chair of Catering – Food Supply

Catering Management

Module-number	Workload	ECTS-Credits	Semester	Frequency offered	Course length
OE-BS-VPF	BSc Oe:VVM - 135 hours, divided in <ul style="list-style-type: none"> • 72 in-class hours • 63 hours self-study 	5	6 th semester	Summer semester	1 semester
Module-type Compulsory			Level of the module Bachelor		Language German
1	Qualification objectives The students are able to: <ul style="list-style-type: none"> - know the particularities of the catering industry, the specific needs of different age groups, the economic constraints and policy options, - Understand the structures and processes in catering outside the home, which are necessary for assessing catering systems, - apply case-related diet planning and enterprise resource planning systems in diet planning and delivery as well as in controlling, - solve planning tasks that arise in catering facilities, taking into account economic, social, and environmental factors, - develop target-oriented knowledge from subject literature during self-study and i in project work, to professionally discuss and to present the results. 				
2	Content of the module <ul style="list-style-type: none"> - Organisational models in food catering businesses - Inventory management - Procurement management - Storage and logistics management - Cost management and Controlling - Environmental management - Change management 				
3	Teaching methods <ul style="list-style-type: none"> - 2 seminar - 2 exercises 				
4	Requirements for participation Recommended: Contents of the modules Service Economy I and Service Economy II				
5	Requirements for receiving credits Presentation; Rregular participation in the seminar, work on practical examples in exercises, passed module examination				
6	Usability of the module Compulsory for the BSc Dietetics, Compulsory for the profile Catering Management des BSc Oe:VVM, elective for the profile Supply Management des BSc Oe:VVM; elective in the BSc Oe:EGL				
7	Examination type Oral examination				
8	Remarks Excursions to various catering facilities				
9	Methods of assessment Grading				
10	Responsible for the module Chair of Catering – Food Supply				