Academic Year 2017

Registration and enrolment at http://www.vhb.org

Published by

Bavarian Virtual University
Office:
Luitpoldstraße 5
96052 Bamberg
Telefon: 0951/863-3800
Telefax: 0951/863-3805
E-mail: info@vhb.org
**Subject Group**

<table>
<thead>
<tr>
<th>Subject Group</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Informatics</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science</td>
<td>9</td>
</tr>
<tr>
<td>Economic Sciences</td>
<td>12</td>
</tr>
<tr>
<td>Engineering</td>
<td>21</td>
</tr>
<tr>
<td>Health Care / Health Management</td>
<td>23</td>
</tr>
<tr>
<td>Key Skills</td>
<td>24</td>
</tr>
<tr>
<td>Languages</td>
<td>26</td>
</tr>
<tr>
<td>Law</td>
<td>37</td>
</tr>
<tr>
<td>Medicine / Medical Science</td>
<td>40</td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>42</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>43</td>
</tr>
<tr>
<td>Social Work</td>
<td>45</td>
</tr>
<tr>
<td>Teacher Education</td>
<td>46</td>
</tr>
</tbody>
</table>
Computational Methods in the Internet Economy

Prof. Dr. Michael Scholz
Universität Passau

Abstract
In this course participants will learn how to apply commonly used quantitative methods to analyse internet data. The course will focus on online consumer behaviour, trust games and network analysis. Specifically students will explore how individuals behave in an online shopping environment and what algorithms and techniques can be used to examine their decision-making processes. Practical examples and research are used to illustrate quantitative methods. Most algorithms are implemented in the programming language R. The course provides a brief introduction to using R for data analysis. Tests and practical assignments in R at the end of each chapter will help students assess how well they covered the material. Prior Knowledge: Basic knowledge of statistical reasoning will be useful, but not compulsory. No programming experience is required.

Course structure
1. Introduction: definition “Internet Economy”, computational methods in internet economy, computation example with R
2. Consumer behaviour: modelling purchase decision-making processes, opinion mining, implementation in R
3. Games in internet economy: foundations of game theory, reputation mechanisms, implementation in R
4. Network analyses: graphs and networks, link analysis, social network analysis, implementation in R

Hours per week / Credits
4 SWS / 6 ECTS

Exam
Written examination
Abstract
“Decision Analysis” is a field that analyses human decision behaviour and provides decision support in terms of mathematical models and quantitative methodologies. It is applied in many practical applications, including production planning, facility location, freight transport, and portfolio selection. In this course, participants will learn how to model real world scenarios with quantitative models and solve them efficiently. The course includes an introduction to decision making and to approaches for decision making under risk and under uncertainty. With regard to decision making under certainty, the course addresses various mathematical optimisation approaches, including linear optimisation, discrete optimisation and nonlinear optimisation. In order to illustrate the theoretical constructs, the course contains practical examples and exercises in the programming language R.

Course structure
1. Decision making: introduction, decision making under uncertainty and under risk, decision making and utility, implementation in R
2. Linear programming: introduction, geometrical perspective, algorithmic perspective, transportation problem, implementation in R
3. Discrete optimisation: introduction, motivational examples, branch & bound algorithm, implementation in R
4. Nonlinear programming: introduction, motivational examples, modelling nonlinear programs, solving nonlinear programs, implementation in R

Hours per week / Credits
4 SWS / 6 ECTS

Exam
Written examination
Fundamentals of Project Management
Business and IT

Prof. Dr. Markus Westner
OTH Regensburg

Abstract
The course „Fundamentals of Project Management“ introduces you to the main concepts, standards, methods and approaches relevant to project management from a managerial perspective. The course requires no specific prerequisites. Examples are geared towards IT and business projects. Apart from covering the fundamental concepts, the courses focuses on the most important activities in project management as illustrated in the syllabus from chapter 3 to 13.

Course structure

1. Introduction
2. Organizational Aspects of Projects
3. Project Selection
4. Leadership and the Project Manager
5. Scope Management
6. Project Team Building, Conflict, and Negotiation
7. Risk Management
8. Cost Estimation and Budgeting
9. Project Scheduling
10. Agile Project Management
11. Resource Management
12. Project Evaluation and Control
13. Project Closeout and Termination

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Written examination
Abstract
Participants acquire knowledge regarding the potential of optimised processes supported by software systems, which is of significant importance for purchasers. Students will learn what types of solutions are available for different procurement tasks. Participants will also learn how the parties involved have to adjust their processes in order to generate the best possible economic benefit. Students will be taught how to pursue projects introducing and rolling-out electronic procurement solutions. Additionally, participants will learn how to motivate staff and users in order to ensure optimised system utilisation.

Course structure
1. Procurement: tasks and objectives
2. Categorisation of IT-tools
3. Integrated strategic and operational IT-based processes in procurement: the SCOPE specs

Module 1: Optimised operational processes
1. Analysis of operational processes
2. Optimised operational processes
3. eCatalogs and eStandards
4. Usage models
5. Tasks of the procurement function
6. Performance and ROI analysis
7. Effects of optimised 02P processes on suppliers
8. Project and change management
9. Conventional MRP systems and execution systems
10. Electronic supply chain management

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Written examination
Abstract
Participants acquire knowledge regarding the potential of optimised processes supported by software systems, which is of significant importance for purchasers. Students will learn what types of solutions are available for different procurement tasks. Participants will also learn how the involved parties have to adjust their processes in order to generate the best possible economic benefit. Students will be taught how to pursue projects introducing and rolling-out electronic procurement solutions. Additionally, participants will learn how to motivate staff and users in order to ensure optimised system utilisation.

Course structure
Module 0:
1. Procurement: Tasks and objectives
2. Categorisation of IT-tools
3. Integrated strategic and operational IT-based processes in procurement: the SCOPE specs

Module 2: Strategic processes and tools
1. Strategic issues and processes in supply management
2. Electronic market places: aim, structure, and functionalities
3. E-sourcing: issues, processes, and tools
4. E-auctions: principles and tools
5. Spend analysis and supply market analysis
6. IT-supported supplier relationship management
7. Collaboration tools in supply management

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Written examination
Abstract
Companies face a growing importance of gaining easy and fast access to information, which can often be multimedia-based. For a long time, databases have been the most appropriate medium to fulfill this task. But recently, new developments and technologies have emerged, which led from isolated database concepts to company-wide information models using embedded web technologies, and, at the same time, allowed the reinterpretation existing economic concepts. The goal of this course is to establish an understanding of the tasks, concepts, approaches and conditions for knowledge management. Furthermore, a connection will be established between the technological capabilities and management approaches as well as the more comprehensive concepts of organisational knowledge.

Course structure
1. Introduction and scope
2. Definitions and concepts of organisational memory
3. KM: concepts and frameworks, activities and methods
4. Knowledge management systems and tools for KM
5. Content and Document Management Systems (CMS/DMS)
6. Knowledge management and Web 2.0: social software, wikis
7. Search engines and knowledge visualisation
8. Institutionalisation and social aspects of knowledge management
9. Measuring KM success
10. Interdisciplinarity of KM and reference disciplines

Hours per week / Credits
4 SWS / 6 ECTS

Exam
Written examination
FPGA-Online Basic Course with VHDL
A basic FPGA course about fundamentals in programmable logic, basic circuit design and communication to external components with online laboratory

Prof. Dr.-Ing. Dietmar Fey, Dipl.-Inf. Marc Reichenbach,
Dipl.-Inf. Michael Schmidt
Friedrich-Alexander-Universität Erlangen-Nürnberg

Abstract
The module “Basics of FPGAs” is suitable for a one semester course for bachelor degree students in computer science, electrical engineering and similar technical study programmes. Participants will learn about the structure and functioning of FPGAs and how to program them in a top-down fashion. They will also be able to recognise the application area of FPGAs and the pros and cons of specific FPGAs. Additionally, they will learn conceptual modelling and implementation of digital circuits using FSM and VHDL. The focus is not only on the programming of the interior of the FPGAs but also on using peripheral devices on an FPGA board. After the course the students will have gained competence in modern design flows using industry standard design tools. For the practical exercises the students will have access to real FPGA boards via the internet. They can control the boards using a web browser and can watch the results shown by LEDs and a 7-segment display on the boards utilising webcams. There are several basic boards available.

Course structure
1. Historical development of programmable devices
2. Architecture of FPGAs
3. FPGA board, tools and online laboratory
4. VHDL introduction 1-3
5. Design flow
6. Architectural design for FPGAs 1-5

Hours per week / Credits
4 SWS / 5 ECTS

Exam
Oral examination
Abstract
The course “Introduction to Automata, Languages, and Computation” provides the participants with fundamental knowledge in the fields of the theory of computation, that is, automata theory, formal languages, computability and complexity theory. Teaching the theory of computation provides the basics for every branch of modern computer science. The insights are part of almost every curriculum in the field. Moreover, theoretical computer science encourages logical reasoning, and reveals common structures pertaining to computer science in general as well as to the studies of Management Information Systems. This course imparts the knowledge, abilities and skills university students need to solve complex problems by applying well-established concepts of information and communication technology. The course is recognised by the participating universities, OTH Regensburg and Universität Regensburg, and is in line with their examination regulations.

Course structure
1. Introduction and Finite Automata
2. Regular Expressions and Formal Languages
3. Context-free Grammars and Formal Languages
4. Pushdown Automata (PDA)
5. Turing Machines and Computability
6. Complexity Classes

Hours per week / Credits
4 SWS / 6 ECTS

Exam
Written examination
Abstract
“Tele-experiments with mobile robots” brings basic robot theory and its implementation together into an introductory course for all students. Given that this tele-course is used as part of regular on-site lectures, the course contents are kept up-to-date and always accessible. The experiments available here include a carefully selected mixture of real-world examples and simulations of robotic principles. Various topics in field robotics including kinematics, navigation principles, path planning, theoretical analysis and inverse kinematics, and sensor data acquisition and processing are discussed and students are presented with challenging quizzes before beginning the experiments. Students also spend time reflecting on acquired sensor values and their interpretation. Time delay concepts in robot tele-operation on variable bandwidth networks are also transparently presented to users as part of involuntary learning.

Course structure
1. Kinematics of a car-like mobile robot
2. Navigation control of a car-like mobile robot
3. Path planning of a car-like mobile robot
4. Modelling of the forward and inverse kinematics of a differential drive robot
5. Sensor data acquisition and processing

Hours per week / Credits
4 SWS / 6 ECTS

Exam
Seminar paper
Ergonomics

Prof. Dr. Katja Radon
Ludwig-Maximilians-Universität München

Abstract
The science of ergonomics analysis organizes and processes designs taking into account the operating economy, technology, organisation and social conditions, and the consequences of work on health. Often an interdisciplinary approach is employed in order to accomplish tasks and to obtain the optimal design of workplaces with minimum cost. Specifically, two approaches are given particular consideration: the adaptation of work for humans and the adaptation of humans to work. Knowledge of ergonomics is thus important for employees in occupational health services (doctors, nurses), industrial and organizational psychologists, and safety engineers.

Course structure
1. Part 1: Business administration (introduction to business administration: organisation, material management, production, marketing, accounting, finance)
2. Part 2: Physical aspects of ergonomics (ergonomics introduction: posture, chairs, work environment, computer workplace, ergonomics methods and techniques, injuries, test)
3. Part 3: Psychosocial aspects of ergonomics (change, too much work, healthy workplaces, mobbing, no proper job, mistakes, rehabilitation)

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Case-study-based essay
Abstract
This course offers specific insights into logistic processes in the global retail industry. By participating in the course, the students will understand the specific aspects of logistics for FMCGs [fast moving consumer goods] better and more in-depth.

Each module consists of a video lecture and script. Additional material and exercises enhance the presented topics. As the entire lecture, the readings, the additional material and the exam is in English, proficiency in English is required.

This course distinguishes itself with its orientation towards applicability with a specific emphasis on retail logistics. The course is thereby focused predominantly on the operational area in retail logistics and thus offers a comprehensive introduction and a special focus in the area of global retail logistics.

Course structure
1. Overview
2. Characteristics & basics
3. Trends & challenges
4. POS logistics
5. Interfaces
6. Load units & transport logistics
7. Cross docking
8. Warehousing & distribution
9. Sourcing challenges in emerging markets

Hours per week / Credits
4 SWS / 6 ECTS

Exam
Written examination
Abstract
Supply chain management “ [...] encompass[es] the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners [...]. In essence, Supply Chain Management integrates supply and demand management within and across companies.”

Course structure
1. Integrated logistics, procurement, materials management and production
2. Material inventory and material requirements in the enterprise
3. Strategic procurement
4. Management of procurement and purchasing
5. Fundamentals of production systems
6. Warehouse management, picking systems, in-plant material handling, packaging
7. Distribution logistics, global tracking and tracing
8. Modes of transport in international logistics
9. Disposal logistics
10. Logistics controlling
11. Global logistic structures and supply chains
12. IT systems in supply chain management
13. Sustainable supply chain management

Hours per week / Credits
4 SWS / 5 ECTS

Exam
Written examination
Abstract
In a more and more global business environment with increasing complexity and speed of change, companies face new challenges nearly every day. These companies are steered by leaders, which is why their role and responsibilities have become increasingly demanding as well. To be able to deal with these challenges successfully, leaders need sufficient qualifications and a solid knowledge base. This course gives an introduction and an overview of the principles of people management in an intercultural context. The various aspects of leadership are considered in direct reference to an intercultural context. The challenges for leaders to lead employees with different cultural backgrounds and to create a motivating working environment form the base for understanding the relevant tasks and tools of leadership. In addition, the model of ethics-oriented leadership is introduced as a core concept for sustainable success.

Course structure
1. Leadership and communication in a global world – an introduction
2. Introduction to communication and intercultural differences
3. Leadership and communication in an intercultural setting – basic principles
4. Leadership tasks and tools from an intercultural perspective
5. Ethical leadership

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Participants need to hand in a group task every week (group size 4-6 students) and pass the written examination at the end of the semester.
Management of Change Processes in a Global World
An introduction into change management: processes, key success factors and roles & responsibilities

Prof. Dr. Katrin Winkler
Hochschule für angewandte Wissenschaften Kempten

Abstract
Change processes are a core element of any professional life in companies today. The challenges coming with change are well known. However, a variety of projects in companies still fail when facing these challenges for lots of different reasons. In globally operating companies, intercultural aspects increase the difficulties. Especially the cultural component is often neglected in an organizational change – too often the goals are purely data-driven. Yet many studies have shown that the corporate culture is just as important for a successful change as the strategy and the structure of a company. This course offers an overview of this important topic: What is change management? Why is change so difficult? And what are the key factors for success? These aspects are discussed with a specific focus on changes in international environments. Globalization presents both opportunities and challenges which are considered in more detail.

Course structure
1. The case for change - why change is necessary for a company in a global word
2. The nature of change in an international setting
3. Change management or change leadership in a global context?
4. Communication as the key to manage change effectively
5. Managing the (inter-)cultural aspect of a change process
6. Change management - summary and review

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Participants must hand in a group task every week (group size 4-6 students) and pass the written examination at the end of the semester.
Abstract
The course „Product Innovation Management in Emerging Markets“ is intended for future managers and entrepreneurs who want to understand the trends in the management of product innovation in a context of emerging markets. The course includes a combination of online lectures, videos, keynotes, and case studies in which participants study the management of product innovation in emerging economies. Students will become familiar with academic literature about product innovation management in emerging markets, understand basic concepts of innovation and emerging markets, learn different types of innovations originating from emerging markets, apply their knowledge about innovation in emerging markets in case studies, and learn to apply the case study method as part of an interdisciplinary team (group presentation).

Course structure
1. General course information
2. Introduction to the course
3. How we define emerging markets
4. How we define innovation
5. The good enough innovation
6. Reverse innovation
7. Transformation of strategies
8. Future outlook
9. Group assignments

Hours per week / Credits
4 SWS / 6 ECTS

Exam
Oral examination / Group presentation
Abstract
Students will learn about the state of the art of sponsorship-linked marketing, including sponsorship activities in sports, arts and culture, social causes, science and education, as well as ecological causes. Sponsorship-linked marketing is the orchestration and implementation of marketing activities in order to build and communicate an association to a sponsored property. Sponsored properties can be sports teams, festivals, charities, and schools, to state some examples. The course includes both online lectures (twelve units in total) and case examples that are part of the units. At the end of the module, students understand how sponsorship portfolios are created from the perspective of different stakeholders (sponsors and ambushers, event organizers, individuals, media). The students understand the basics in sponsorship and sponsorship-linked marketing, including recent developments and the chain of effects of the sponsorship-linked marketing management process.

Course structure
1. Introduction and overview of the sponsorship-linked marketing management process
2. How sponsorship-linked marketing activities influence stakeholders
3. Outcome measurement and controlling in sponsorship-linked marketing
4. Sponsorship-linked marketing implementation

Hours per week / Credits
4 SWS / 6 ECTS

Exam
Written examination
Abstract
The demand for highly skilled employees is steadily increasing in the global market. Hiring people with the right skills and developing them to fully use their potential is one of the most crucial challenges for leaders and companies in the future. Therefore, “Talent Management” can be read on many corporate websites as a key HR tool, but few people really understand the full scope of it. This course gives a comprehensive overview of this important topic that (future) leaders as well as HR managers must be aware of. It covers the different aspects of talent management: how to recognize and assess talent, further develop employees and continuously improve their performance, as well as succession planning and employee retention. After going through this course, students will understand the overall goal, content and structure of talent management, as well as how it is incorporated into the overall corporate strategy.

Course structure
1. Managing talent in a global world: an introduction
2. The leader’s role in talent management
3. Competence management
4. Performance management
5. Managing training and development
6. Succession management

Hours per week / Credits
2 SWS / 2 ECTS

Exam
Participants must hand in a group task every week (group size 4-6 students) and pass the written examination at the end of the semester.
Public Economics

Prof. Dr. Hanjo Allinger
TH Deggendorf

Abstract
Public economics focuses on the state’s role in attempts to regulate the economy. Some market failures are well known and require state action. Markets can either fail because the market outcome is inefficient or because it is unjust. But how exactly should the state respond to undesired market outcomes? Several general market failures like externalities or public goods will be defined. Students learn about the appropriate state reaction to these market failures to maximize welfare in society. The course offers an introduction into taxation theory and shows which market side has to bear the burden of a tax. Students will learn how to distinguish good taxes from bad taxes. Last but not least students will be introduced to two completely different approaches to handle justice in a scientific context: exogenous and endogenous justice. In these two fields they learn to work with different concepts of justice and how to apply them to real world analysis.

Course structure
1. Introduction
3. Market failure: Externalities
4. Market failure: Monopolies and Merit Goods
5. Introduction to Optimal Taxation Theory
6. Redistribution and Justice

Hours per week / Credits
2 SWS / 2,5 ECTS

Exam
Written examination
Integrated Production Systems

Prof. Dr.-Ing. Jörg Franke
Friedrich-Alexander-Universität Erlangen-Nürnberg

Abstract
Participants of the lecture “Integrated Production Systems” obtain an overview of the tasks of a production manager of a globally acting company. Therefore, the lecture explains, based on the overall goals of an integrated production system, the main methods and tools of a lean culture. The contents are presented in learning videos and slides. Additionally, every student must work on practical case studies.

Course structure
1. Production systems in the course of time
2. Structure of integrated production systems
3. Implementation of integrated production systems
4. Continuous improvement process
5. Process orientation in production systems
6. Lean global production
7. Total quality management
8. Low cost automation
9. Total productive maintenance
10. Material and energy efficiency
11. Information efficiency
12. Lean development
13. Lean administration

Hours per week / Credits
4 SWS / 5 ECTS

Exam
Participants must hand in 3 case study tasks during the semester and pass the written examination at the end of the semester.
Planning and Management of Computer Networks Interactive-Online
Orig. title: Planung und Management von Computer Netzwerken (PMCIO)

Prof. Dr. Alexandru Soceanu
Hochschule für angewandte Wissenschaften München

Abstract
As a first step, the course imparts the necessary basics of networking, which creates the basis for network management which, in turn, is addressed. The course gives an overview of network components, the setup of computer networks, the most important network management techniques, and the handling of different management tools for the purpose of monitoring, optimising, and troubleshooting networks. Within different interactive exercises participants are offered the possibility to setup and run important network components in a virtual laboratory. In the course, a textbook, a tutorial, and practical exercises are available for each key topic. In addition, video conferences are offered on a weekly basis.

Course structure
1. Surveys of fundamentals on computer networks
2. Network management architecture
3. Network management functionality
4. Simple Network Management Protocol (SNMP) and NetFlow
5. Management Information Base (MIB)
6. Structure of Management Information (SMI)
7. Quality of Service (QoS)
8. Network security
9. Network management tools

Hours per week / Credits
4 SWS / 5 ECTS

Exam
Written examination
Abstract
The lecture “Cross-border Health Care Management” offers students from various disciplines an insight into the structure and framework of the global health care industry in a modern, internationally networked health care system.

Course structure
1. Supply and demand in medical tourism and cross-border health care
2. Countries of origin and destination in medical tourism
3. Legal issues of cross-border health care management
4. Marketing in medical tourism
5. Transcultural features of international patients
6. Processes in medical tourism
7. Ethics and morals
8. Case studies

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Seminar paper
Intercultural Communication I

Prof. Dr. Martina Rost-Roth
Universität Augsburg

Abstract
The learning material for this course is available in English with the aim of helping international students, in particular, to understand and participate in the course. However, forum activities will be in German only and compulsory tasks must be submitted in German. Likewise, it is only possible to take the final examination in German.

Course structure
1. Welcome
2. Intercultural awareness
3. Assessing culture
4. Culture and language
5. Intercultural business communication

Hours per week / Credits
2 SWS / 4-7 ECTS

Exam
Written examination
Scientific Writing

Prof. Dr. Katja Radon
Ludwig-Maximilians-Universität München

Abstract
“Scientific Writing” in English is a crucial qualification course for students of all disciplines and all academic levels (Bachelor’s, Master’s, PhD). Specifically for students of natural sciences who are often required to write texts in English (ranging from letters and e-mails about papers, to abstracts, posters, scientific publications and grant applications), this course shall not only help them face the “fear of blank page” but also help them overcome the language barrier. The online seminar “Scientific Writing” targets students of natural sciences and health sciences who wish to improve their academic writing skills in English. The course helps students attain skills in literature searching, drafting various parts of scientific publications, und publishing and presenting the results of scientific work in English. The objective of the seminar is to provide a brief theoretical introduction on each topic of the course. Exercises with clearly defined tasks give students the opportunity to test what they have learned and applied directly during the seminar. For example, the student has the opportunity to draft one’s own scientific publication step-by-step. Immediate feedback from the tutor can help the students with their queries if they are stuck. The learning objectives are specified at the end of each class.

Course structure
1. Getting started
2. The writing process
3. Publishing and presenting
4. Evaluation and conclusion

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Seminar paper / Online examination
Abstract
The online course Business English Scenario Training for Engineers (or in short BEST4Engineers) is designed for engineering students who want to acquire basic skills for writing e-mails, telephoning and business-related small talk situations. BEST4Engineers consists of two task-based scenarios with six units each. Every unit contains preliminary exercises in which the students gain a deeper understanding of the respective topic. The acquired skills are subsequently applied in their assignments.

Course structure
SCENARIO 1 A technical visit
1. Addressing requests
2. Exchanging contact details
3. Fixing appointments
4. Rescheduling appointments
5. Enjoying dinner talk
6. Expressing appreciation

SCENARIO 2 A sales situation
1. Finding suitable equipment
2. Talking numbers
3. Visiting trade fairs
4. Calls for offers and procurement
5. Handling complaints
6. Solving problems

Hours per week / Credits
2 SWS / 2 ECTS

Exam
Written examination
Abstract
This is an online skills course for students from all academic fields. This course is designed for the student that would like to go abroad to study and / or work and is oriented on the B2 level of the Common European Framework. “English for Studying, Working, and Living Abroad” will concentrate on covering letters, e-mail communication and banking, housing / accommodation, and survival skills all with a touch of intercultural training. It is a task-based course where students learn to identify key vocabulary in job adverts and assess their skills using a SWOT (strengths, weaknesses, opportunities and threats) analysis. The participants write a covering letter and improve e-mail writing skills through:
- e-mail register
- correct word usage

They improve intercultural skills through vocabulary and terminology in:
- banking
- finding accommodation
- arranging a medical appointment and going to the doctor

Course structure
1. Job descriptions and covering letters
2. E-mail communication
3. Banking / housing / accommodation and dealing with medical appointments

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Modular tests
Abstract
This course covers the three topics of renewable energy, smart buildings and e-mobility. The learner will gain a deeper understanding of these topics, their development in Germany, and very importantly, improve their English skills as they relate to these subjects. Learners will use their listening, reading, writing and grammatical skills in completing the course units for all subjects.

Course structure
Unit 1 Introduction

Module: Renewable energy
Unit 2 Solar technologies
Unit 3 Wind technology
Unit 4 Hydropower
Unit 5 Renewable energy for the future

Module: Smart buildings
Unit 6 Building design
Unit 7 Building management systems
Unit 8 Passive buildings
Unit 9 Intelligent workplaces and dwellings

Module: Electric mobility
Unit 10 Hybrid technology
Unit 11 Electric-only cars
Unit 12 Other renewable-mobility technologies
Unit 13 The future of transport

Hours per week / Credits
2 SWS / 2 ECTS

Exam
Written examination
Abstract
English Vocabulary and Usage for Physics (C1) is aimed at the development and expansion of students’ subject-specific vocabulary at C1 level. The course is designed to allow learners to improve both their vocabulary range and the accuracy of its usage.

Course structure
1. Empirical and experimental work
2. Mathematics and calculation
3. Presentations and talks
4. Important and famous theories
5. Argumentation and data

• The course consists of 5 modules, each associated with a different aspect of the use of English in physics.
• Each module uses its topic as a vehicle for the development and expansion of the learner’s vocabulary range and the correct, natural usage of this terminology.
• The modules each contain notes, written exercises and listening exercises, allowing students to train the correct application of the vocabulary introduced.
• The course will be graded on the basis of a single written examination at the end of the semester, the details of which will be published directly in the course during the semester.

Hours per week / Credits
2 SWS / 2,5 ECTS

Exam
Written examination
Abstract
• You want to improve your technical English competency.
• You are prepared to commit 45 to 60 hours of your time.
• Your command of English is already at an intermediate level.
• You are a student or professional in computer science, electrical or mechanical engineering or one of the related specialisations.
• You would like to earn a technical English certificate at the C1.1 level of the Common European Framework (CEF).

Traditional lessons plus e-learning makes blended courses. As with all serious courses of foreign language education offered in the framework of the electronic media, “e-Xplore Technical English” follows the blended course concept. In other words, “e-Xplore Technical English” was designed as a complementary component of traditional English courses, since learning a foreign language exclusively by means of computer is inconceivable. Human interactive communication is indispensable for learning a foreign language. It is a good idea, therefore, to study your web course in parallel with a conventional English course. Accordingly, any language issues or problems can be discussed with non-virtual communication partners.

Course structure
1. Technical English: 6 units with over 100 complex, repeatable tasks and a terminology trainer with over 1,000 exercises for 200 entries
2. Academic and business English: 9 short guides with introductions and interactive exercises
3. Grammar: theory and practical usage
4. e-Xplore words: effective on-line tools for learners of English

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Online examination
**Flaw and Order**
The grammar of word order and information structure in English

Dr. Gunter Lorenz  
Friedrich-Alexander-Universität Erlangen-Nürnberg

**Abstract**
“Flaw and Order” is aimed at advanced learners of English who study English as a main subject (i.e. students of Anglistik/Amerikanistik). It is intended as an online component of a classroom course; it is not recommended for use without an on-campus course at your university!

Ideally, “Flaw and Order” would be used to complement a course in academic writing or other formal types of text production. It focuses on the rules of word and constituent order in English (part 1), as well as on the application of the principles of information structure (part 2). Even advanced students of English are not always aware of where to put the most relevant, new, or weighty information in a sentence. Flaw and Order attempts to make learners aware of this deficit and of ways of remedying it. Due to the limitations of the online medium, the application of the principles acquired needs to be trained in practical writing classes. The computer can in no way replace intelligent human teaching and feedback here ...

**Course structure**
1. Word order rules in English (3 units)  
2. Principles and grammar of information structure (4 units)

**Hours per week / Credits**
2 SWS / 3 ECTS

**Exam**
Written examination
Abstract
This course covers the four themes of Communication Media, Tools for International Project Management, Intercultural Conflicts/Challenges in an International Environment and Project Management.
The learner will gain a deeper understanding of these themes, their development in Germany, and very importantly, improve their English skills as they apply to these subjects. Learners will use their listening, reading, writing and grammatical skills in completing the course units for all subjects.

Course structure
1. Introduction
2. E-Mail/Informal Written
3. Presentations
4. Teleconferences/Telephoning
5. Software tools – inclusive project management collaborative software
6. Rapid Prototyping
7. 3-D Printing
8. High and Low Context Cultures
9. Verbal and Non-Verbal Communication
10. Dealing with Intercultural Conflicts
11. Documentation (Reporting, Project Controlling etc.)
12. Managing People
13. Managing Across Boarders

Hours per week / Credits
2 SWS / 2 ECTS

Exam
Written examination
Prof. Dr. Christian Rester
Technische Hochschule Deggendorf

Abstract
This course is designed for students from a variety of health fields who want to broaden their knowledge about research skills and selected health topics. Students will improve their ability to read and interpret health articles which are taken from many different sources. Competence with basic terminology and technical language will also be improved by the examination of these research documents. Each chapter contains learning videos, articles and tests to focus the learning of the students about these specific health topics.

Course structure
1. International Health Systems
2. Evidence-Based Health Care
3. Physical Health and the Way towards It
4. The Challenges of an Aging Society
5. The Importance of Understanding Pain
6. Health Promotion - Starting before Health Stops

Hours per week / Credits
4 SWS / 5 ECTS

Exam
Written examination
**ReMedial Grammar Advanced**
An online error correction module for advanced learners of English
(for students of English only!)

Dr. Gunter Lorenz
Friedrich-Alexander-Universität Erlangen-Nürnberg

Abstract
“ReMedial Grammar Advanced” is intended to help advanced learners of English better understand how grammar works in context - at their respective individual paces. The course is not intended as yet another grammar of English; there are plenty of good student grammars available already. Nor is it strictly a grammar course, with basic structures at the beginning and a systematic progression to more complex ones. In the exercises, all finite and non-finite verb forms can come up, and in our explanations we presuppose a reasonable knowledge of the actual rules and give reminders of how they are to be applied in context. “ReMedial Grammar Advanced” is intended as an online component of a classroom course; it is not recommended for use without an on-campus course at your university. If you are interested in using “ReMedial Grammar Advanced”, please have your English department contact the “ReMedial Grammar” team at the FAU Erlangen.

Course structure
- Finite and non-finite verb forms
- 6 + 6 test units (exam mode and exercise mode)

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Written examination
SciEnglish - Scientific English for Psychologists
Orig. title: SciEnglish - Wissenschaftliches Englisch für Psychologen

Dipl.-Psych. Paul Held
Friedrich-Alexander-Universität Erlangen-Nürnberg

Abstract
This course is designed to facilitate the reading and understanding of scientific literature in psychology, by imparting strategies of elaboration, understanding and usage of relevant English texts. The theoretical linguistic basics which are needed for the thorough understanding of scientific literature are communicated, trained and stabilised through numerous specific exercises and English-language articles and texts.

Course structure
Introduction
Module 1: Introduction to SciEnglish

Part I (Reading textbooks)
Module 2: Formation of words
Module 3: Exercises
Module 4: Exercises

Part II (Understanding scientific journals)
Module 5: Stylistics of English
Module 6: Exercises

Part III (Articles from scientific journals)
Module 7: Further readings

Hours per week / Credits
2 SWS / 4 ECTS

Exam
Online examination
Technical Writing for Scientists and Engineers (B1/B2)

Mike Schwer
Technische Hochschule Nürnberg Georg Simon Ohm

Abstract
This course is for students who plan to study or work in an English-speaking country, want to publish internationally (i.e. journal articles, patents, product descriptions) or frequently come into contact with English due to their chosen field of study. Students learn how to organize and express facts and ideas through written text in order to create documents for the workplace.

Course structure
Topic 1: The writing process (organising ideas and creating outlines, from the outline to the first draft, scrutinising your text, module revision test)
Topic 2: Letters, e-mails, and beyond (correspondence, netiquette, negation, Did you know?, module revision test)
Topic 3: Describing your data (SI units and technical writing, tables, graphs and charts, Did you know?, module revision test)
Topic 4: Writing instructions (instructions, expressing mood, capitalization, Did you know?, module revision test)
Topic 5: Intellectual property (trade secrets, passive voice, Did you know?, module revision test)

Hours per week / Credits
2 SWS / 2 ECTS

Exam
Written examination
European and International Monetary Law

Prof. Dr. Christoph Herrmann
Universität Passau

Abstract
Law students will be equipped with a basic understanding and knowledge of the structure and functioning of modern monetary systems as well as the fundamental legal frameworks that govern them at international and European levels. This will enable them to independently and critically assess developments and issues in this particular field from a legal point of view on the basis of EU and international law. Students of international economics and of public policy/governance will be able to describe and understand international and European monetary law from a legally informed perspective and therefore assess issues in monetary law from a basic legal point of view. They will have broadened their existing knowledge in the fields of economics and political science through an interdisciplinary approach to international monetary relations.

Course structure
A. Interdisciplinary introduction
B. International monetary law
Monetary sovereignty under public international law, history of international monetary law, fundamental legal problems of international monetary relations, the international monetary constitution: the IMF articles of agreement - institutional design and decision-making and substantive legal obligations
C. European monetary law
History of monetary integration in Europe, the legal framework of EMU post-Lisbon - institutional setup and substantive legal rules, EMU and the sovereign debt crisis - measures and legal assessment

Hours per week / Credits
2 SWS / 5 ECTS

Exam
Written examination or essay
German Company Law

Prof. Dr. Christoph Teichmann
Julius-Maximilians-Universität Würzburg

Abstract
The course takes the form of a text-based script which, in addition to theoretical discussion, includes cases, their solutions and review questions. Combined with a discussion forum, the course script will enable students to gain a basic understanding of German company law in an international context. The course emphasis lies upon the characteristics of German law, which distinguish it from other jurisdictions. The course therefore enables students to gain knowledge of the legal framework within which companies operate and also offers the opportunity to improve technical English skills.

Course structure
Chapter 1: Introduction
Chapter 2: Director’s remuneration
Chapter 3: Corporate mobility and international company law
Chapter 4: Partnerships; I. GbR and OHG, II. KG
Chapter 5: GmbH
Chapter 6: Corporate Governance in the AG
Chapter 7: Employees’ co-determination
Chapter 8: Capital and creditor protection
Chapter 9: Group law

Hours per week / Credits
2 SWS / 5 ECTS

Exam
Written examination
Legal Issues of Regional Economic Integration

Prof. Dr. Christoph Herrmann
Universität Passau

Abstract
The course starts with an introduction unit describing the international economic system that is based on two pillars, namely multilateral relations, e.g. the regime of the World Trade Organization (WTO), and bi-, respectively plurilateral relations in the form of regional trade agreements (RTAs). The course also provides an overview of the legal and institutional foundations of regional economic integration with regard to the WTO system and a three-unit specialisation on three specific legal issues related to regional integration of merchandise trade. Further, the course covers the essential issues that are subject matter of so-called “21st century trade agreements” like the TPP or CETA.

Course structure
1. Regional Economic Integration through Law: an Introduction
2. Legal and Institutional Foundations of Regional Economic Integration
3. Structural Features of Regional Economic Integration
4. Regional Integration of Merchandise Trade
5. Preferential Rules of Origin
6. SPS Regulation in RTAs and Regulatory Cooperation
7. Customs and Trade Facilitation
8. Regional Integration of Services Trade
9. Bilateral and Regional Protection and Liberalization of Investments
10. Bilateral and Regional Protection of Intellectual Property
11. Regional Commitments on Competition Policy and Trade Defense Instruments
12. Regional (Free) Movement of Natural Persons
13. Monetary Union
14. REI Entities in Global Governance: the EU
15. Regional Economic Dis-Integration: the Brexit

Hours per week / Credits
2 SWS / 5 ECTS

Exam
Written examination
Abstract
The course is divided into two parts, Part I: Biological monitoring in occupational health and Part II: Occupational skin diseases. Part I begins with the basic aspects of anatomy, physiology, and toxicology. The knowledge of these is a fundamental pre-requisite for understanding the concept of “Biological Monitoring in Occupational Medicine”. The most important aspects of biological monitoring are then explained with the help of realistic cases. Part II deals with skin diseases that are occupationally-induced. After an introduction of the fundamental aspects of the structure and functions of the skin, the most common occupationally-induced skin diseases are presented using realistic cases. The cases are presented with the help of case stories, photographs, and expert comments. The case stories illustrate the causes, symptoms, diagnoses, biomonitoring methods, lines of therapy, and preventive measures. The user-friendly learning tool, CASUS, provides the learning platform for the cases. At the end of the course the student will have gained knowledge and understanding of the basic concepts and methods in biological monitoring and occupational dermatoses.

Course structure
Part 1: Biological monitoring in occupational health
Part 2: Occupational skin diseases

Hours per week / Credits
2 SWS / 3 ECTS

Exam
Online examination
Epidemiology / Public Health

Prof. Dr. Katja Radon
Ludwig-Maximilians-Universität München

Abstract
The academic course “Epidemiology / Public Health” is built on computer-based, English-language case studies from the field of epidemiology / public health. Epidemiology is concerned with the question of how diseases spread among different populations and studies the factors that influence and determine the patterns of disease spread. Different subareas can be distinguished in this respect. Public health belongs to the field of health sciences and deals with the theory and practice of disease prevention, extension of life expectancy and health promotion through organised community-oriented measures. In addition to identifying the risk factors, public health also places the identification of health promoting factors (salutogenesis) as well as the analysis and evaluation of healthcare structures center stage. The knowledge about relevant epidemiological and medical issues is taught by means of case histories, photo materials and expert statements.

Course structure
1. Introduction into the course
2. Epidemiology and prevention of heart and blood circulation diseases
3. Epidemiology and prevention of cancer (Screening)
4. Epidemiology and prevention of cancer (Mobile devices)
5. Epidemiology and nutrition
6. Global public health
7. Occupational epidemiology
8. Genetic epidemiology
9. Lifestyle factors

Hours per week / Credits
2 SWS / 2 ECTS

Exam
Online examination
ABC: Approach to the Basics of Calculus

Prof. Dr. Hans-Georg Weigand, Prof. Dr. Thomas Weth
Julius-Maximilians-Universität Würzburg

Abstract
The course introduces the basics of calculus, which are necessary for success in a calculus lecture at the university. It can be taken as a preparatory course before the first semester and before the lecture “Calculus I” starts. But it can also be taken parallel to the lecture “Calculus” in the first semester.

The course was developed together with the Finnish Virtual University and Dr. Antti Rasila from the Helsinki University of Technology. See http://math.tkk.fi/people/antti.rasila.en.html

Course structure
1. Sequences and limits
2. Functions
3. Properties of functions
4. Differentiation

Hours per week / Credits
2 SWS / 2 ECTS

Exam
Written examination / Exercise
Policymaking in the European Union
Institutions and decision-making processes in selected policy fields

Prof. Dr. Daniel Göler
Universität Passau

Abstract
This English-language course deals with the structures and the internal decision-making processes of the European Union as part of the field of international relations. The overall aim of the course is to provide a profound knowledge of the EU’s institutional structures as well as policymaking processes in the EU.

Course structure
I. The multi-level governance system of the EU
Stages of development, the EU: an association of states sui generis, how does the EU work?, the institutional structure of the EU (European Council, European Commission, European Parliament and Council of the EU), current challenges - the EU under critical review

II. Political decision-making processes in the EU
Between deliberation and bargaining, intergovernmental decision-making processes and procedures: Common Security and Defence Policy (CSDP), supranational decision-making processes and procedures: migration and asylum policy

III. Learning by doing - simulation of the Council of the EU
Preparing the position papers - the «Dublin III Regulation», introducing and discussing the commission paper, being in charge: simulation of the meeting of the Council of the European Union, debriefing, consolidating results and concluding discussion

Hours per week / Credits
2 SWS / 2-5 ECTS

Exam
Position paper or written examination
Social Sciences

Regionalism and Global Governance

Prof. Dr. Bernhard Stahl
Universität Passau

Abstract
The course examines the wide spectrum of promising potential and high hurdles facing regional integration. Various regional organisations (ROs) are presented and analysed. The main focus is placed on the analysis of institutional characteristics of ROs (structures, decision-making processes) as well as their role in providing governance functions in the global context. Against the background of inter-regional agreements increasingly displacing global, multinational agreements, ROs play an increasing role for ‘global governance without global government’.

Learning objectives:
By the end of the course, students shall be able to make a qualified assessment of specific regional organizations in the context of global governance. They will have a profound knowledge about institutional characteristics of various regional institutions in different world regions. They should also be able to compare regional organisations in a structured and focused manner. Furthermore, by the end of the course, students will possess a substantial knowledge about the theories that are presented and discussed in the course and shall be ready to apply these theories in a term paper.

Course structure
Chapter I: Introduction and theories
Chapter II: Regional Organisations (ROs) - Cases and analysis
Chapter III: ROs and global governance

Hours per week / Credits
2 SWS / 3-10 ECTS

Exam
Seminar paper
Abstract
Learning about children’s rights is essential for social workers, parents, teachers, and all those who are working with, or who are in close contact to, children. In this course, students will learn about the universal Convention on the Rights of the Child (CRC) including its core principles and structural elements. To understand why the current discourse on inclusion is of utmost importance for both social work and human rights it is necessary to take a look back into history. Therefore, in the second part of the course, the application of the eugenic ideal of the so called “Nordic race” will be in focus. The various chapters include an introduction to the time of the Nazi dictatorship and National Socialism (1933-1945). It will highlight especially the history of forced sterilisations and institutional murders, but it will also discuss forms of resistance. On this basis current issues and trends focusing on the right to inclusive education as well as on diversity will be discussed.

Course structure
Part I: International approaches of social work and children’s rights
1. Convention on the Rights of the Child
2. Childhood in a global/local context
3. Play, education, and work
4. The sense of belonging
5. Human rights education with children

Part II: International social work, disability, and inclusion
1. Disability, illness, and euthanasia in Nazi Germany
2. After the war in Germany (1945-today)
3. After the war at an international level (1945-today)
4. The right to inclusive education

Hours per week / Credits
4 SWS / 5 ECTS

Exam
Seminar paper
Foundations of CLIL
Content and Language Integrated Learning

Prof. Dr. Heiner Böttger, Tanja Müller
Katholische Universität Eichstätt-Ingolstadt

Abstract
The online seminar “Foundations of CLIL - Content and Language Integrated Learning” is an English-language module for the subject-didactical training in the field of Anglistics / American studies. In addition, it is also appropriate for professional development for teachers. The course imparts basic competences in the field of didactics of bilingual subject instruction, known within expert discussions as the acronym CLIL. The training within the online seminar concerning the didactics of foreign language teaching is also a meta-didactical one: the various production- and competency-orientated as well as diverse task formats are at the same time exemplary for methods which are ideally used in CLIL teaching. This also applies to the exemplary test forms comprising open and closed tasks which merge into a comprehensible evaluation.

Course structure
1. Introduction to CLIL
2. Language acquisition revisited
3. Towards multilingualism
4. Literacy learning in CLIL
5. Early CLIL
6. Lesson planning - 4Cs framework
7. Lesson planning - scaffolding
8. Error analysis and feedback
9. Assessing CLIL
10. Developing CLIL material
11. Test

Hours per week / Credits
2 SWS / 4-5 ECTS

Exam
Written examination
Abstract
GE as a holistic concept provides pedagogic as well as didactical answers to questions on globalization, cultural diversity and the development of the world’s society. The roles languages and language acquisition play in this context will be the main focus of the online seminar, which will be held in English only.

Course structure
1. Global (Language) Skills
2. Media Education
3. Conflict Resolution
4. Sustainability Education
5. Workshop I
6. Workshop II
7. Global Citizenship or Human Rights & Responsibilities or Intercultural Education Unit
8. Global Citizenship or Human Rights & Responsibilities or Intercultural Education
9. Workshop II
10. Workshop II

Hours per week / Credits
2 SWS / 4 ECTS

Exam
Project
Foreign language learning and teaching with digital media

Prof. Dr. Thorsten Piske, Bernhard Hölzel
Friedrich-Alexander-Universität Erlangen-Nürnberg

Abstract
Through the ten modules of this course, students of foreign language didactics become acquainted both with basic issues of digital media in EFL classrooms and with the practical usage of digital tools therein. The latest digital media will be introduced against their theoretical background and will be analyzed, critically reviewed and creatively adapted to meet the requirements of contemporary FL didactics. This course examines various pros and cons of digital tools for learning processes and prepares students to reasonably integrate digital instruments into their own future teaching, with a prime focus on aspects of Task Based Language Learning, WebQuests, Intercultural Communicative Competence and Content and Language Integrated Learning. Digital tools introduced in this course are:
Authoring systems, Blogs, CALL/CMC, Corpora, Digital slide presenters / posters, Editing and displaying tools, EduApps, File sharing tools, LMS, MALL, Screencasts, Social networks, Wikis

Within each module, course participants are required to read embedded PDFs and sometimes do exercises to check their comprehension (multiple-choice, true-false-questions,...). Some modules also include developing your own schedular outline of lessons and sharing your ideas with other course members in a task-specific forum.
This course aims for proficiency in the field of media didactics and a thorough understanding of how to enrich foreign language learning and teaching efforts with digital media. Students become aware of innovative ways to digitally enhance EFL lessons and reflect upon both the benefits and disadvantages of digital tools.

Hours per week / Credits
2 SWS / 4 ECTS

Exam
Written examination