# International Summer Program (ISP)

Track A: Engineering

Track B: German and European Studies

Track C: Business and Entrepreneurship


## Course Catalog 2023

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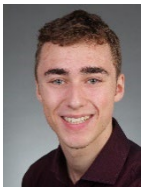

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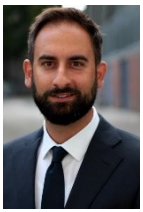

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# German Language Course

(Compulsory class for all tracks)

## Lecturers

tba

## Time

Mondays, 10:00 – 13:00

Wednesdays,16:00 – 19:00

## Location

Tba (Mondays)
Tba (Wednesdays)

## Course Description

For beginners of German we will offer the German A1.1 course. This class focuses on the introduction to the German language, simple oral and written communication, and basic German grammar. The following competences are imparted: Students who pass the course successfully will be able to provide information about themselves and their country of origin; to greet and to say goodbye; to talk about their family; to express their condition, preferences and resentments; to talk about their hobbies and leisure time; to make and understand time designations; to name prices and quantities; to name things of everyday life (groceries, furniture); to phrase simple questions; to talk about simple activities and events in the past tense.

The textbook "Schritte plus: Deutsch als Fremdsprache" (1 through 6 according to the course level) will be used in class.

## Credits

The German language course meets twice a week throughout the 7 weeks of the lecture period. This corresponds to 4.5 ECTS credit points or 3 credit hours.

## Exam

There will be a final written or oral exam.

## Germany – Politics, Culture and Society

(Compulsory Class for Tracks A&C, Elective Class for Track B)

### Lecturers

Iris-Aya Laemmerhirt

### Time

tba

### Location

tba

### Course Materials

Information regarding the organization of the course and course materials can be found in Moodle/Website:

tba

### Aim of Lecture

The German culture course "Germany – Politics, Culture and Society" is designed to introduce students to Germany's cultural landscapes and political life. You will gain insights into your host country's past and present and will be encouraged to contribute your own first-hand experiences to class discussions.

## Course Description

The compact seminar covers the following topics:

- General introduction to Germany
- Topic specific workshops on German politics (including short student presentations)
- German history before and after World War II, including reunification (the material includes nonfiction, historical texts and visual material)
- German literature (short overview and some examples)
- German culture (including German food culture, sports, music)
- Migration in Germany: introduction to the topic; discussion of migration including a contemporary German film on the topic
- The Ruhr Area (focus on this specific region, its history and culture)

This course is a mandatory seminar for students who take classes exclusively from Track A – Engineering. If you attend classes from Track B – German and European Studies, you may choose whether to take part in this course. You will meet on two separate days at the beginning and at the end of the program for one day of compact seminar each.

## Requirements

Interest in Germany.

## Credits

The course will be taught 2 hours/week over a partial semester. This corresponds to 1 hours/semester-week or 1.5 ECTS credits.

# Part I:
# Track A – Engineering

# Chapter 1: Biochemical and Chemical Engineering

## 1.1. Dynamic Simulation

### Lecturers

Prof. Dr. Hansjörg Freund

### Time

Mondays, 15:00 – 18:00

### Location

tba

### Aim of Lecture

The aim of the course is that the student obtains an understanding how dynamic process simulators work and is able to formulate, solve and analyze problems in advanced dynamic process simulators.

### Lecture Content

The course dynamic simulation teaches the theoretical and practical use of advanced dynamic process simulators. The software used is gPROMS, a commercial equation-oriented modeling and optimization framework, which is widely used in the chemical industry. In order to teach the students the handling and implementation in gPROMS, the following topics are dealt with:

- Basics of numerical mathematics:
    - Types of dynamic systems
    - Numerical stability
    - Numerical solution of ODEs
- Basics of gPROMS
    - Implementation of basic models
    - Solving basic models in gPROMS
- Object oriented programming in gPROMS
    - Theory of object oriented programming
    - Realization in gPROMS
- Logical conditions and scheduling in gPROMS
- Numerical solutions of partial differential equations
    - Discretization methods
    - Initial and boundary conditions
- Implementation of partial differential equations in gPROMS
- Dynamic optimization
    - Basics of optimization theory
    - Solving of dynamic optimization problems
    - Dynamic optimization of chemical processes in gPROMS

## Requirements

The students should be able to derive models of chemical processes and to understand given process models.

## Credits

The course will be taught 3 hours/week over a partial semester. This corresponds to 1.5 hours/semester-week or 1.5 ECTS credits.

## Exam

Written (computer-based) or oral exam.

## Website

tba

## 1.2. Logistics of Chemical Production Processes

### Lecturers

Prof. Dr. Sergio Lucia Gil

Dr. Christian Sonntag

### Time

Lecture: Thursdays, 14:15 – 15:45

Tutorial: Fridays, 8:00 – 9:45

### Location

Thursdays: tba

Fridays: tba

### Aim of Lecture

The students obtain an overview of supply chain management and planning, scheduling problems in the chemical industry, techniques and tools for modeling as well as simulation and optimization. These include discrete event simulation, equation-based modeling, mixed-integer linear programming, heuristic optimization methods as well as modeling and optimization using timed automata.

The students will be enabled to identify logistic problems, to select suitable tools and techniques for simulation and optimization as well as to apply them to real-world problems.

## Lecture Content

1. Introduction to batch processes and supply chain management
2. Discrete event simulation: problem abstraction, classification, queuing policies, random number generation, probability distributions
3. Scheduling: Gantt charts, terminology and generic problem representation, machine environments, state task networks (STN), resource task networks (RTN), classification of batch scheduling problems, uniform discrete and non-uniform continuous time representation, campaign and moving horizon scheduling
4. Linear programming: properties of linear programs, graphical method, simplex method
5. Mixed Integer Linear Programming:
   Integer and binary variables, branch and bound algorithm, concept of relaxation, concept of convex hull, search algorithms
6. Modeling: modeling with binary variables, contingent decisions, big "M" constraints, case-study: production of expandable polystyrene (EPS)
7. Heuristic optimization: exact and heuristic optimization, heuristic algorithms, meta heuristic algorithms, classification of search techniques
8. Scheduling with timed automata: comparison of MI(N)LP and TA, TA modeling, semantics, reachability analysis, reduction techniques, reactive scheduling

## Tutorial and Laboratory Contents

1. Paper-based supply chain management game Bullwhip effect, decisions with limited information
2. Discrete event simulation with INOSIM Professional (computer-based): recipe driven simulation of a paint factory
3. Production scheduling with Schedule Pro and Lekin (computer-based): dispatching rules, impact of
4. Sequence-dependent changeovers, campaign scheduling
5. Mixed Integer Linear Programming (paper-based): modeling and solution of MILPs, graphical solution, branch and bound algorithm
6. Modeling and Optimization with AIMMS (computer-based): building of graphical user interface, economic optimization of EPS production
7. Timed Automata Scheduling with TAOpt (computer-based)

## Requirements

Higher mathematics course.

## Credits

The course will be taught 4 hours/week over a partial semester. This corresponds to 2 hours/semester-week or 3 ECTS credits.

## Exam

Written or oral final exam.

## Recommended Reading

S. Engell: Logistic Optimization of Chemical Production Processes, Wiley-VCH 2008.

T.F. Edgar, D.M. Himmelblau, L.S. Lasdon: Optimization of Chemical Processes, McGraw Hill 2001.

## Website

https://pas.bci.tu-dortmund.de/teaching/teaching-offer/logistics-of-chemical-production-processes/

## Moodle

Tba

## 1.3. Bubbles and Drops in Chemical and Biochemical Processes

### Lecturers

Prof. Dr.-Ing. Norbert Kockmann

tba

### Time

Wednesdays, 10:00 – 14:00

### Location

tba

### Aim of Lecture

Methods of generation, application and basics of discrete multiphase systems

### Lecture Content

Basics and multiple methods of drops and bubbles formation in liquid/gas and liquid/liquid systems, atomization and gas dispersing systems, application of spray processes. Basics of forming, behavior and application of liquid films. Measurement methods to characterize these systems.

### Requirements

Basic knowledge in Fluid Mechanics.

## Tutorials

Calculation of typical applications in process engineering.

## Laboratory

Demonstration of capillary flow and two phase columns.

## Credits

The course will be taught 4 hours/week over a partial semester. This corresponds to 2 hours/semester-week or 3 ECTS credits.

## Exam

Written or oral final exam.

## Recommended Reading

All slides presented, will be given to attendants of the course together with recommendations of the literature.

## Website

http://www.ad.bci.tu-dortmund.de/cms/en/teaching/lectures/bubbles_and_drops/index.html

## Moodle

tba

## 1.4. Essentials of Micro Process Engineering

### Lecturers

Prof. Dr.-Ing. Norbert Kockmann

tba

### Time

Thursdays, 12:00 – 15:30

### Location

tba

### Lecture Content

Micro-structured apparatuses allow intensified processes with excellent heat transfer, fast mixing and continuous process control. Applications in chemistry, analytics, process engineering and energy technology are covered. Special attention is given to single-phase and multi-phase flows, micromixers, mass and heat transfer, micro heat exchangers, microcontactors, chemical reactions, micro-reactors, continuous production processes and various applications. Manufacturing and design, application, laboratory and miniplant equipment, process intensification.

### Requirements

Basic knowledge in Fluid Mechanics.

## Credits

The course will be taught 4 hours/week over a partial semester. This corresponds to 2 hours/semester-week or 3 ECTS credits.

## Exam

Written or oral final exam.

## Recommended Reading

All slides presented, will be given to attendants of the course together with recommendations of the literature.

## Website

http://www.ad.bci.tu-dortmund.de/cms/en/teaching/lectures/micro_process_eng/index.html

## 1.5. Fundamentals of Synthetic Biology – Genetic Circuit Design

### Lecturers

Prof. Dr. Markus Nett

### Time

Mondays, 14:00 – 16:00 (31.05-14.07)

+ 7*2 hours of recorded videos

### Location

tba

### Lecture Content

Synthetic biology is a young scientific field that seeks to rationally engineer biological systems using approaches and methods common to well established engineering disciplines. In the last 15 years, researchers turned genes and other genetic elements into programmable parts with predictable functions. With these parts, it has become possible to create complex genetic systems that are capable of a wide range of tasks: from the production of sustainable food, fuel and therapeutic drugs to the development of medical diagnostics and treatment tools. This course introduces the basic concepts and techniques of synthetic biology.

When the ISP begins, already 7 lectures will be hold. However, they are recorded and posted online, so you will be able to watch them during or prior to the ISP. The topics are separated from each other, so they are not relevant for later lectures.

## Requirements

Basic knowledge of genetic and biotechnological engineering.

## Credits

The course will be taught 2 hours/week over a full semester. This corresponds to 3 ECTS credits.

## Exam

Written

## Moodle

tba

# Chapter 2: Automation and Robotics

## 2.1. Data-Based Dynamic Modeling

### Lecturers

Prof. Dr.-Ing. Sebastian Engell

### Time

| | | |
|---|---|---|
| Lecture: | Wednesdays, | 10:00 – 12:00 |
| Tutorial: | Thursdays, | 15:45 – 17:15 |

### Location

| | |
|---|---|
| Wednesdays, | tba |
| Thursdays, | tba |

### Aim of Lecture

- Concepts of models, which can be identified from data
- Judging the quality and the limitations of data-based models
- Theory and basic calculations of the z-transformation

The students can identify the dominant dynamics of a process from step responses and can apply modern methods and algorithms to identify the parameters of linear process models from measured data. The students know the concept of the z-transformation. They know the structure of nonlinear black box models and can judge the quality and the limitations of data-based models.

## Requirements

The students should know basic concept of the Laplace-transformation and transfer functions.

## Lecture Content

This lecture deals with different linear and non-linear black-box models.

The identification of the parameters of these models is the first topic, beginning with the identification of simple models from step responses. The goal here is to find a model of a system by looking at its step response. Stable or unstable systems, systems with over- and/or undershoot or oscillating systems can be modeled by simple transfer functions in the Laplace-domain. Methods like Kupfmüller or Schwarze can be applied to given step responses. The identifiability of poles and zeros of transfer functions also depends on their position in the complex plane.

The next types of models, which are covered in this lecture, are linear transfer functions in the (sampled) z-domain. An introduction to sampling and problems which arise from sampling are discussed (e.g. Shannon theorem). The z-transformation is introduced and calculation rules e.g. for inverse transformations are discussed and applied. The relation between transfer functions in the s- and z-domains (position of the poles, transformation) is discussed.

An important class of black-box models is described as prediction error methods. The theory behind ARX, ARMAX and OE models is explained in detail. Different methods for the numerical parameter estimation (linear and nonlinear numerical least squares

estimation) are discussed. The capability of representing a systems behavior by such models is highly dependent on the model order. Accuracy and overfitting are discussed.

The last part is about modeling using nonlinear black box models (perceptron neural nets, radial-basis-function nets). Concepts of training and the usage of neural networks as dynamic models are introduced. The quality of neural net models is discussed.

## Tutorials

The lectures are supported by tutorials, in which the concepts are applied. Some of the tutorials are computer-based and are carried out in a computer lab. The tutorial contents are listed below:

- Step response identification (Methods of Kupfmüller, Strejc and Schwarze)
- Computer lab: step response identification (validation of graphical methods / Optimization-based step response identification (with MATLAB))
- Discrete-time systems / z-Transform
- Computer lab: ARX parameter estimation (with MATLAB)
- Computer lab: prediction error methods (with MATLAB)
- Non-linear black box modeling

## Credits

The course will be taught 4 hours/week over a partial semester. This corresponds to 2 hours/semester-week or 2.5 ECTS credits.

## Exam

The students are graded with an assignment (15%) and one written or oral exam (85%). The assignment is an application example, which has to be solved using a computer. The solution has to be described and submitted.

## Website

https://pas.bci.tu-dortmund.de/teaching/teaching-offer/data-based-dynamic-modeling/

# Chapter 3: Applied Mathematics

## 3.1. Intensive Course in Statistics

### Lecturers

Prof. Dr. Markus Pauly

tba

### Time

| | |
|---|---|
| Lecture: | Wednesdays & Thursdays: 12:00 – 14:00 |
| Tutorial: | Wednesdays: 10:00 – 12:00 |

### Location

Wednesdays (10:00-12:00): tba

Wednesdays & Thursdays (12:00-14:00): tba

### Aim of Lecture

The course gives an introduction to statistical concepts that are useful for research projects in various fields of application and areas of science.

### Lecture Content

The lecture is largely based on the book “Montgomery, D.C. and Runger, G.C. (2007): Applied Statistics and Probability for Engineers, 4th ed., Wiley, New York”.

## Table of contents:

1. Introduction (random experiments, random variables, sample space)
2. Empirical distributions and exploratory data analysis (frequency tables, bar charts, histograms, distribution characteristics)
3. Probability theory (probability, conditional probability, independence, total probability, Bayes rule)
4. Random variables and their distribution (discrete distributions (Uniform, Bernoulli, Binomial, Hypergeometric, Poisson), continuous distributions (Uniform, Normal), expectation and variance, sampling distribution theory, joint distributions, covariance and correlation
5. Estimation and confidence intervals (properties of estimators, Maximum Likelihood estimator, confidence intervals)
6. Hypothesis testing (Test of statistical hypotheses (Binomial test, Gaussian test, t-test, approximate tests), power, p-value)
7. Regression (simple / multiple regression, tests concerning regression)
8. Time series analysis (descriptive time series analysis (moving average, differencing), stationarity)

## Requirements

Except for basic mathematical calculus no prior knowledge is necessary.

## Tutorials and Laboratory

The tutorial will be used to practice the course material by solving statistical problems and to further discuss student questions. The statistical computer package R will be introduced for statistical programming and used by the students to analyze small data sets. This includes theoretical tutorials and software labs.

## Exam

Written or oral exam.

## Credits

The lecture/tutorial will be taught 6 hours/week over a partial semester. This corresponds to 3 hours/semester-week or to 5 ECTS credits.

## Recommended Reading

Basics of Probability and Statistics:

- Bain, L.J., Engelhardt, M. (1992): Introduction to Probability and Statistics, Duxbury Press, Pacific Grove.
- Montgomery, D.C. and Runger, G.C. (2007): Applied Statistics and Probability for Engineers, 4th ed., Wiley, New York.
- Fahrmeir, Künstler, Pigeot, and Tutz (2007) Statistik (6th ed.) (in German).

Basics of R:

- Dalgaard, P. (2008): Introductory Statistics with R, 2nd ed., Springer, New York.

- Venables, W.N. and Ripley, B.D. (2002): Modern Applied Statistics with S, 4th ed., Springer, New York.

## Website

https://www.statistik.tu-dortmund.de/3076.html

# Chapter 4: Computer Science

## 4.1. Architecture & Implementation of DBMS

### Lecturers

Prof. Dr. Jens Teubner

Roland Kühn

### Time

Lectures: Mondays, 8:00 – 10:00
Wednesdays, 8:00 – 10:00

Tutorials: Mondays, 10:00 – 12:00 OR
Mondays, 12:00 – 14:00 OR
Tuesdays, 8:00 – 10:00 OR
Wednesdays, 12:00 – 14:00

### Location

Lectures, tba

Tutorials: Mondays, tba
Tuesdays, tba
Wednesdays, tba

### Course Description

Database systems form the heart of virtually any enterprise application. They manage vast amounts of data, yet allow for fast and efficient search; they handle thousands of updates every second, yet will not trip over problems due to concurrency; and

guarantee consistency and data integrity even in the case of catastrophic events (loss of hardware, etc.).

In this course we learn how database systems can provide this service and performance. We will look "under the hoods" and understand how a database is built internally. We will get to see techniques that allow to construct a system in a scalable and robust manner.

ISP students will attend the second part of the course, in which we will discuss transaction management (concurrency control, two-phase locking); failure tolerance (recovery, ARIES); distributed data management; and database support for special applications (analytics, text search).

## Credits

The course will be taught 6 hours/week over a partial semester. This corresponds to 3 hours/semester-week or 4 ECTS credits.

## Exam

Written or oral exam.

## Website

http://dbis.cs.tu-dortmund.de/cms/de/lehre/ss22/arch-dbms/index.html

## Moodle

tba

# Part II:
# Track B – German & European Studies

# Chapter 5: Courses for German & European Studies

## 5.1. The Union at Risk: History and the Future of the European Union

### Lecturers

Jan Hildenhagen

### Time

May 29th – July 10th:

Mondays, 16:00 – 19:15

### Location

Emil-Figge-Straße 50 - 0.420

### Course Description

Since the economic and financial crisis that started in 2008, and especially after the so-called "migration crisis" in 2015 and the BREXIT in 2020, the European Union seems to be in danger. The war in Ukraine and the Covid-19 pandemic appear to be further steps into an uncertain future for the EU. Is the Union at Risk?
Using political speeches as well as journalistic and academic articles, students will engage in a dialogue with the instructor and each other about the history and future development of the EU. By discussing different opinions and possible alternative models, students will gain a better understanding of the European Union in the context of an imagined "European identity" since 1945.

### Credits

Credits will be awarded on the basis of a presentation and/or an essay/term paper. The course will be taught 2 hours/semester-week which corresponds to 3 ECTS credits.

## 5.2. Sampling Hip Hop

### Lecturers

Heather Mease

### Time

May 30th – July 11th:

Tuesdays, 8:30 – 11:45

### Location

Emil-Figge-Straße 50 - 0.420

### Course Description

In the 1970s, critics dismissed a new form of music, dancing, MCing, and graffiti writing as "just a fad in the Bronx" that was sure die out eventually. Decades later, hip hop continues to maintain its influence on contemporary popular music and culture. This course presents a survey of hip hop from its origins in the Bronx to the multifaceted, international forms of hip hop today. Course materials in the form of reading, listening, and documentary assignments will focus on the history of the music creation techniques and technologies such as mix-tape making, DJing, MCing, beatmaking, sampling, streaming, and the cultures surrounding its creation.
Heather Mease is a visiting instructor from the University of Virginia.

### Credits

The course will be taught 2 hours/semester-week which corresponds to 3 ECTS credits.

## 5.3. Coffee & Cafés – A Beverage & Its Cultural Impact

### Lecturers

Bernd Eßmann

### Time

June 1st – July 13th:

Thursdays, 10:15 – 13:45

### Location

Emil-Figge-Straße 50 - 0.420

### Course Description

Coffee is a ubiquitous beverage that we usually take for granted without reflecting on the impact it has on our culture(s). We will take a closer look at it, specifically the places that it is frequently – & publicly – consumed in, the cafes. Be those traditional cafes (the coffeehouses in Vienna come to mind) or rather recent developments such as Starbucks. In this course we will try to find out their function in our culture(s), to find out whether cafes are, as Ray Oldenburg puts it, "hangouts at the heart of a community". For this we will take a look at the US and Germany, but especially also the perspective of the International Summer Program participants will give us valuable insights.

## Credits

The course will be taught 2 hours/semester-week which corresponds to 3 ECTS credits.

## 5.4. What is "German"? German History and Identity Formation

### Lecturers

Jan Hildenhagen

### Time

June 1st – July 13th:

Thursdays, 16:00 – 19:15

### Location

Emil-Figge-Straße 50 - 0.406

### Course Description

Germany is a perfect example of how the political construction of nations (imagined communities), borders and discourse shape societies and influence them; for example, through a culture of remembrance. The book/podcast "Memories of a Nation" serves as a basis for discussion in the course.
In addition, using journalistic and scientific articles, students will enter into a dialogue with the instructor and each other regarding the history and culture of the "Germans".
Discussing various moments of German history, the students will get a better understanding of the alleged "German identity".

### Credits

Credits will be awarded on the basis of a presentation and resp. an essay/term paper. The course will be taught 2 hours/semester-week which corresponds to 3 ECTS credits.

## 5.5. Soundtracks of Fear – Music in the Horror Film

### Lecturers

Sandra Danneil

### Time

May 31st – July 12th:

Wednesdays, 8:30 – 11:45

### Location

Emil-Figge-Straße 50 - 0.420

### Course Description

One of humans' most natural reaction to gruesome moments of a horror film is to cover their eyes in fear. American musicologist Robynn Stilwell has pointed out about film sound in general, „We can't cover our ears with the same certainty of muting the unwanted sounds as we can avert our gaze to stop seeing something". Whereas music in form of score, soundtrack, special sound effects, noises, soundscapes, and audible silence can generally be defined as a mental framework that guides the way we watch and how we experience the image on screen, horror deserves an even closer recognition as you know it's a horror film not by watching, but by listening to the audio track only. Neil Lerner observes that horror, more than any other genre, gives music a heightened responsibility for triggering feelings of horror, fear, rage"– an observation that critics have downplayed and scholars have left undertheorized for a long time.

The seminar will throw a critical ear on vital examples of music from horror film history, explore how specific patterns undermine viewers'

sense of security, discover why sounds consciously cause physical arousal, or how specific soundscapes subconsciously help to make a film reception become an almost visceral experience. Since the course is part of the ISP program, we will put on our transatlantic glasses to investigate how horror made in Hollywood has taught us different lessons than horror made in UK, Germany or France. The seminar requires a considerable amount of engagement and initiative as we will continue with my ongoing FEARacademy project that includes the production of a student podcast on Spotify as well as the maintenance of the social media account on Instagram.

## Reading

Neil Lerner. Music in the Horror Film: Listening to Fear (2009) (available as e-book via the university library)

## Credits

The course will be taught 2 hours/semester-week which corresponds to 3 ECTS credits.

## 5.6. 19th-Century Radicalism: A Comparative Approach

### Lecturers

Mark Schmitt

### Time

May 30th – July 12th:

Tuesdays, 14:15 – 17:45

### Location

Emil-Figge-Straße 50 - 0.215

### Course Description

The 19th century was a period of dramatic social, political and cultural changes in Britain, but also in the rest of Europe and the US. A series of Reform Acts brought significant changes in voting rights and other sociopolitical matters, and the Revolutions of 1848 would dramatically impact the way countries across Europe would see class relations, political democracy and national identities. The emergence of the figure of the radical, if not a unique invention of the 19th century alone, embodies many of the complex changes, attitudes and uncertainties of the century. The radical is a figure at the intersection of politics, activism, class, arts and culture. Radicals can be working-class agitators, artists with a fierce creative vision, or Russian anarchist terrorists.

In this Summer School seminar, we will explore 19th-century radicalism and its expressions in politics, society, literature and culture with a comparative transnational perspective. Students will

be introduced to the major historical events and developments of the century, to the emerging ideas of the time, such as Karl Marx and Friedrich Engels' Manifesto of the Communist Party, to the emerging underground journalism of anarchist magazines and newspapers including The Anarchist, Freedom and Freiheit, as well as to important literary representations of radicalism such as George Eliot's Felix Holt: the Radical and Thomas Hardy's Jude the Obscure.

Students will learn to familiarise themselves with the causes and effects of important historical events and developments and their international impact, to analyse such events in a comparative manner, to analyse and interpret literary texts in their historical contexts, and to do digital archival research with 19th-century periodica.

## Reading

The following novels will have to be purchased individually prior to the first session:

George Eliot. Felix Holt: The Radical. Penguin Classics, 1995 or later.

Thomas Hardy. Jude the Obscure. Penguin Classics, 1998 or later.

William Morris. News from Nowhere. Penguin Classics, 2005 or later.

Suggested introductory reading:

Craig Calhoun. The Roots of Radicalism: Tradition, the Public Sphere, and Early Nineteenth-Century Social Movements. Chicago UP, 2012.

Timothy Morton (ed.). Radicalism in British Literary Culture, 1650-1830. Cambridge UP, 2002.

## Credits

The course will be taught 2 hours/semester-week which corresponds to 3 ECTS credits.

## 5.7. Social Realism in Transnational Cinema

### Lecturers

Mark Schmitt

### Time

June 1st – July 12th:

Thursdays, 14:15 – 17:45

### Location

Emil-Figge-Straße 50 - 0.215

### Course Description

Social realism is a mode of filmmaking that has profoundly influenced national cinemas across the globe. Its origins can be identified in the Italian neorealism of the 1940s-50s and in the British New Wave Cinema of the late 1950s-1960s. Social realism itself is hard to define since its styles, techniques and aesthetics can vary. By way of a loose working definition, social realism could be used to describe any film that employs a particular set of representational techniques that try to create an accurate and "unfiltered" image of regular people's everyday lives and surroundings and that are used to deal with a particular set of themes, such as sociopolitical issues, the hardships of regular working-class people etc. Thus, social realism is more of a mode than a distinct genre.

In this Summer School seminar, we will explore the early traditions of social realist cinema, starting with Italian neorealism, the British New Wave and later versions of British social realism and "Brit Grit". We will also look at social realism in US cinema from the 1980s to the

2020s, early-2000s French realism and the Romanian New Wave of the 21st century. The final list of films to be discussed in this class will be made available during the first session.

Students will learn about different traditions of filmmaking in their respective national cultural and historical contexts, to familiarise themselves with the necessary methods of film analysis and interpretation, to critically use film and cultural theory, and to critically understand and compare films from a wide range of international cinemas.

## Reading

Suggested introductory reading:

David Forrest. Social Realism: Art, Nationhood and Politics. Cambridge Scholars, 2013.

Jula Hallam, Margaret Marshment. Realism and Popular Cinema. Manchester UP, 2000.

Samantha Lay. British Social Realism: From Documentary to Brit Grit. Wallflower Press, 2003.

## Credits

The course will be taught 2 hours/semester-week which corresponds to 3 ECTS credits.

# Part III:
# Track C –
# Entrepreneurship

# Chapter 6: Business and Entrepreneurship

## 6.1. Concepts and Cases in International Marketing

### Lecturers

Prof. Dr. Hartmut H. Holzmüller

### Time

Thursdays, 16:00 – 19:00

Fridays, 12:00 – 15:00

### Location

Chemie – HS 2

### Aim of Lecture

This course provides an introduction into issues and problems commonly encountered in strategy formation and decision making by companies operating on an international scale. Students of the course shall

(1) become more sensitive to international marketing issues and develop an understanding of current problems that international marketers face on global markets
(2) develop a knowledge of concepts and methods used in international marketing theory and business practice
(3) be capable of applying the presented framework, concepts and methods, to typical issues in international marketing management

Cases will help you to develop strategic thinking in an international marketing context and will provide you with an opportunity to sharpen your verbal and written communication skills. Utilizing a teaching approach that mixes cases, class discussions, group workshops, you will learn key concepts and tools used in solving international marketing problems.

## Requirements

Basic knowledge in marketing.

## Credits

The course will be taught 8 hours/week over a partial semester. This corresponds to 4 hours/semester-week or 7.5 ECTS credits.

## Exam

Choice between

a) written and graded exam covering the entire class (both Concepts and Cases, 90 minutes)
b) Case Studies (1/3) + written and graded exam on Concepts (60 minutes, 2/3) (mode will be announced in time)

## Recommended Reading

- Keegan, W. J., & Green, M. C. (2015). Global marketing. Upper Saddle River, NJ: Pearson. (available as e-book at Dortmund University library)
- A reading pack with cases and background notes will be available at the Department of Marketing

Website

https://marketing.wiwi.tu-dortmund.de/en/teaching/summer-term/concepts-and-cases-in-international-marketing/

## 6.2. International Business (Bachelor)

### Lecturers

Prof. Dr. Steffen Strese

Res. Assoc. Michael Rammert

### Time

Begin: tba

Tuesdays, 9:00 – 12:00

Wednesdays, 9:00 – 12:00

### Location

Tuesdays: tba

Wednesdays: tba

### Aim of Lecture

This course discusses strategy development while focusing on external environmental influences as well as national culture. Based on that, possible growth strategies for multinational enterprises are introduced. Within those growth strategies the lecture elaborates on innovations as basic success drivers. Moreover, it is discussed how to handle innovative-driven growth in different countries.

### Competencies

By participating in this course students become familiar with basic instruments and tools of strategic management. By including cases,

the tutorial helps students to apply those instruments and tools in practice.

### Requirements

Since you have to decide on an examination variant right at the beginning, it is absolutely necessary that you attend the first session.

### Credits

The course will be taught 8 hours/week over a partial semester. This corresponds to 4 hours/semester-week or 7.5 ECTS credits.

### Exam

Students can choose between two types of examination:

(1) 100% of total course points in exam (90 minute-exam)
(2) 60% of total course points in exam (60 minute-exam), 40% of total course points in student presentation

### Website

https://im.wiwi.tu-dortmund.de/en/teaching/summer-term/course-2-2/

## 6.3. Business Model Innovation

### Lecturers

Prof. Dr. Tessa Flatten

Res. Assoc. Katrin Bauer

### Time

TBA

### Location

Moodle

### Course Content

This course discusses strategy development while focusing on external environmental influences as well as national culture. Based on that, possible growth strategies for mul

In the bachelor seminar Business Model Innovation students get to know the process of business development. In addition to the theoretical teaching of tools for the identification of business ideas, the focus is on practical application. Students develop their own business ideas in teams using the Business Model Canvas and present their results in a final presentation designed to convince potential investors of your idea.

### Credits

The course will be taught 8 hours/week over a partial semester. This corresponds to 4 hours/semester-week or 7.5 ECTS credits.

## Website

https://www.wiwi2.tu-dortmund.de/wiwi/tm/en/lectures/Teaching/Summer-term/BA-Seminar/index.html