Orientation Program

For students of Master programs
School of Business and Economics

Thursday, 11th October 2018
Spandauer Straße 1, Room 220

10.00 – 10.20	Welcome from the Dean of the School of Business and Economics and the Student's Council of the School of Business and Economics.	Prof. Dr. Klapper Student Council
10.20 – 11.00	General and study-specific information about examination procedures and regulations by the Chairman of the Examinations Commission and the Director of the Examination Office (in German!)	Prof. Weinke, PhD Ms Kath
11.00 – 11.30	Information regarding study abroad	Julia Brauer, International Office
11:30 – 12:30	Information on study organisation	Meret Borchmann, Study Office
Break		
Presentation of course descriptions by department chairs (Business Administration)		
Management Science		
13.30 – 14.00	Management Entrepreneurial and Behavioral Decision Making Marketing Business Information Systems Operations Research	Prof. Dr. Klapper
Accounting/Taxation		
14:00 – 14:20	Business Taxation Accounting	Prof. Dr. Gassen
Finance		
14.20 – 14.40	Finance	Prof. Stomper, PhD
Presentation of course descriptions by department chairs (Economics)		
14.40 – 15.00	Macroeconomics	Prof. Weinke, PhD
15.00 – 15.30	Microeconomics	Prof. Weizsäcker, PhD
15.30 – 15.50	Economic History	Thilo Albers
Presentation of course descriptions by department chairs (Quantitative Methods)		
15.50 – 16.10	Statistics and Econometrics	N.N.
Doctoral Program (BDPEMS)		
16.10 – 16.30	Information session for students interested in pursuing a doctoral degree	N.N.

Monday, 15th October 2018

14.00 – 15.30	Information for international students "Studying in Germany", Spandauer Straße 1, Room 220	Mickaël Maillé, International Office
16.00	A welcome for all newly enrolled students of the School of Business and Economics, Spandauer Straße 1, in the foyer of the Faculty	

Other Social Events see https://www.wiwi.hu-berlin.de/de/international/incomings/admission/welcome-weeks

Start of winter term 2018/19: Tuesday, 16th October 2018

Preparatory Courses

Mathematics Preparatory Course, Location: Spandauer Str. 1, 220

Daily 10.00 – 17.00 (incl. breaks):

October, 1st of 2018
October, 2nd of 2018
October, 4th of 2018

Lecturer: Philipp Warode

Content:
The purpose of this course is to review and practice basic mathematical concepts that will be useful throughout your master studies at our faculty. Topics will include:

Basic Matrix Algebra (Systems of linear equations, Determinants, Eigenvalues)
Differential Calculus (of real and multivariate functions, Taylor series)
Optimization (of real and multivariate functions, with and without side constrants)
Integral Calculus

The course is open to all Master students and will be taught in English.

Advanced Mathematics Preparatory Course, Location: Spandauer Str. 1, 203

Daily 10.00 – 17.00 (incl. breaks):

October, 1st of 2018
October, 2nd of 2018
October, 4th of 2018

Lecturer: Prof. Dr. W. Wang

Content: This background course on mathematics aims to provide fundamental mathematical knowledge essential for advanced economic analysis. Although open to all master students, it is specifically tailored to those wishing to directly pursue the advanced Y-track of courses. Therefore in content and form, this intensive course is intended to deliver methods beyond refreshing advanced calculus and linear algebra.
The course solely deals with deterministic mathematics. For some theorems formally rigorous proofs are presented in order to make participants more comfortable with - and ideally to provide some intuition for – constructing and understanding of mathematical proofs. Throughout the course proper use of notation will be stressed. Topics presented in class constitute the minimal required program

given the above aim, and the maximal feasible program given time. Self-study should cover topics skipped in class, as well as the areas of personal weakness.

The lecture takes place as an intensive crash course in the week before the semester.

1. Sets, Relations, Preferences
   characterization of and operations on sets
   truth function
   mappings, functions and relations
   preference relations

2. Vector Spaces and Linear Algebra
   general vector spaces, linear independence, basis of a vector
   linear mappings between vector spaces, matrix algebra
   basis transformations, eigenvalue - eigenvector decomposition

3. Topology and Convex Optimization
   general definition topology, open and closed sets, topological space
   metric, metric space, sequences and convergence in general metric spaces
   norm, normed space and completeness of spaces: Banach and Hilbert spaces
   continuity in general spaces
   compactness and convexity, concavity of sets and functions and relations
   separating hyperplane theorem
   correspondences and fixed point theorems
   existence result of convex optimization problem: Kuhn-Tucker Theorem

4. Differential calculus
   differentiability in one and higher dimensions
   Taylor approximation
   optimization problems

Econometrics Preparatory Course, Location: Spandauer Str. 1, Room 220

Daily 9.30 – 14.30 (incl. breaks):
5th October 2018
8th October 2018
9th October 2018
10th October 2018

Lecturer: Julien Kraemer and Lixing Wang

Content:
1. Motivation
2. The Simple Regression Model (OLS: assumptions, model and estimator, Goodness-of-Fit, Statistical properties of the OLS estimator)
3. The Multiple Regression Model (Model, Interpretation of coefficients, Gauss-Markov-Theorem)
4. Inference & Hypothesis Testing (Testing a single parameter: the t-Test, Testing a linear combination of parameters, Testing multiple linear restrictions: the F-Test, Confidence intervals, OLS asymptotics)
5. Heteroscedasticity and Autocorrelation
6. Maximum-Likelihood-Estimation (The Likelihood function, The ML estimator, Properties)