

## General Information Analysis II for MCS Summer Term 2006

### 1 Lecture Course

Monday	11:40 – 13:20	in S2 02/C120
Thursday	09:50 – 11:30	in S2 07/109

Further notes will be available for copying in the *Lernzentrum Mathematik* (S2 15/244) and for download on the WWW.

### 2 Exercise Groups

During the exercise courses participants are encouraged to work together in small groups guided by their tutors. Exercise sheets are handed out there. In addition to the group exercises, homework will be offered. Written solutions can be handed in the following week and will be corrected by the tutors. We offer one exercise class.

Tutor	Time	Room
Huaying Wang	Thursday 11:40-13:20	S1 03/112

### 3 Tutorial Groups

During the tutorial courses various mathematical questions concerning the content of the lecture and related topics will be discussed. The tutorial group shall deepen the mathematical understanding of the students and shall practise the ability of discussing mathematical

topics. The tutorial groups will be smaller than the exercise groups, and there will be no homework. We offer two tutorial classes.

Tutor	Time	Room
Eyvind Briseid	Tuesday 11:40 – 13:20	S1 14/265
Sven Herrmann	Tuesday 11:40 – 13:20	S1 02/34

## 4 Office Hours

All tutors of the exercise and tutorial groups will offer an official office hour once per week. During these office hours the student can ask questions concerning the current exercises and tutorial classes or the content of the lecture in general. The tutors will agree on the time of the office hours with the students during the classes. Afterwards the schedule of all office hours will be available on the homepage of the lecture.

If help outside these office hours is needed, everybody is welcome to visit the offices of Laurențiu Leuștean (room 226), Eyvind Briseid (room 203), and Sven Herrmann (room 319).

## 5 Course Material

The lecture's homepage is located at

[http://www.mathematik.tu-darmstadt.de/lehmaterial/SS2006/AnaII\\_MCS/](http://www.mathematik.tu-darmstadt.de/lehmaterial/SS2006/AnaII_MCS/)

Here you can download lecture notes as well as supplementary notes. Exercise, homework and tutorial sheets with solutions will also be available here.

Old problem sheets are kept in files under the information board next to room 201 (AG1 library). You can also find here recent information on the course, and solutions to exercises/homeworks/tutorial.

## 6 Exam

There will be a written exam for Analysis I and II. Date and room will be announced on the web page.

The exam will consist of two parts, separated by a 10 minute break:

- Part I will cover Analysis I, and
- Part II will cover Analysis II.

## 7 Literature

The lecture follows:

- K.H. Hofmann. Analysis 1. An introduction to Mathematics in English and German, Heldermann Verlag (2000).
- K.H. Hofmann, Lecture Notes on Analysis II, available electronically at

[http://www.mathematik.tu-darmstadt.de/lehmaterial/SS2006/AnaII\\_MCS/Notes/](http://www.mathematik.tu-darmstadt.de/lehmaterial/SS2006/AnaII_MCS/Notes/)

However, there is quite a large number of other textbooks on analysis. We recommend the following.

### 7.1 Literature – English

- (i) T. M. Apostol: Calculus, Wiley.
- (ii) S. Lang: Real Analysis, Addison-Wesley, Reading/Mass.
- (iii) J. Marsden, A. Weinstein: Calculus. Springer Undergraduate texts.
- (iv) J. Marsden, A. Tromba: Vector Calculus, W.H. Freeman and Company.

### 7.2 Literature – German

- (i) O. Forster: Analysis I,II, Vieweg.
- (ii) K.- Endl, W. Luh: Analysis, Akad. Verlagsgesellschaft.
- (iii) M. Barner, F. Flohr: Analysis I,II, de Gruyter.
- (iv) K. Königsberger: Analysis II Springer.