



## Calculus with Exercises A(2)

### 5. Important functions (1-3 weeks)

Exponential function, trigonometric functions, logarithm, inverse trigonometric functions, Gamma function.

will be explained according to necessity at the corresponding place.

\* denotes optional topics.

### 【履修要件】

特になし

### 【成績評価の方法・観点】

Students will be evaluated based on their performance in both the lecture and the exercises sessions.

\* Lecture will be graded based mainly on the final examination.

\* Exercises will be evaluated based mainly on submitted reports and participation in class.

The details of the evaluation system will be given by the lecturer in the first lecture.

Students who fail to pass the examination but reach a certain standard are eligible for reexamination.

### 【教科書】

Textbook will be announced at the lecture.

### 【参考書等】

( 参考書 )

A. M. Bruckner, J. B. Bruckner, B. S. Thomson 『Elementary Real Analysis』 ( This book can be downloaded for free at <http://classicalrealanalysis.info/Free-Downloads.php> . )

M. Spivak 『Calculus』 ( Publish or Perish ) ISBN:978-0914098911

N. L. Carothers 『Real Analysis』 ( Cambridge University Press ) ISBN:978-0521497565

E. Hewitt, K. Stromberg 『Real and Abstract Analysis』 ( Springer ) ISBN:978-0387901381

### 【授業外学修（予習・復習）等】

It is difficult to follow the lecture without regular study. Therefore, students are expected to devote an amount of time equivalent to the time of the lecture to solve report problems and to review the contents of previous lectures.

### 【その他（オフィスアワー等）】

It is advisable to attend the lecture “ Linear Algebra with Exercises A ” in parallel.

Moreover, it is recommended to register for "Calculus with Exercises B" in the second semester.

There are no fixed office hours. If you wish to have a consultation, please feel free to contact the lecturer.

### 【主要授業科目（学部・学科名）】