



# A Course in Real Analysis

By Hugo D. Junghenn

Download now

Read Online 

## A Course in Real Analysis By Hugo D. Junghenn

**A Course in Real Analysis** provides a rigorous treatment of the foundations of differential and integral calculus at the advanced undergraduate level. The book's material has been extensively classroom tested in the author's two-semester undergraduate course on real analysis at The George Washington University.

The first part of the text presents the calculus of functions of one variable. This part covers traditional topics, such as sequences, continuity, differentiability, Riemann integrability, numerical series, and the convergence of sequences and series of functions. It also includes optional sections on Stirling's formula, functions of bounded variation, Riemann–Stieltjes integration, and other topics.

The second part focuses on functions of several variables. It introduces the topological ideas (such as compact and connected sets) needed to describe analytical properties of multivariable functions. This part also discusses differentiability and integrability of multivariable functions and develops the theory of differential forms on surfaces in  $R^n$ .

The third part consists of appendices on set theory and linear algebra as well as solutions to some of the exercises. A full solutions manual offers complete solutions to all exercises for qualifying instructors.

With clear proofs, detailed examples, and numerous exercises, this textbook gives a thorough treatment of the subject. It progresses from single variable to multivariable functions, providing a logical development of material that will prepare students for more advanced analysis-based courses.

 [Download A Course in Real Analysis ...pdf](#)

 [Read Online A Course in Real Analysis ...pdf](#)



# A Course in Real Analysis

*By Hugo D. Junghenn*

## A Course in Real Analysis By Hugo D. Junghenn

**A Course in Real Analysis** provides a rigorous treatment of the foundations of differential and integral calculus at the advanced undergraduate level. The book's material has been extensively classroom tested in the author's two-semester undergraduate course on real analysis at The George Washington University.

The first part of the text presents the calculus of functions of one variable. This part covers traditional topics, such as sequences, continuity, differentiability, Riemann integrability, numerical series, and the convergence of sequences and series of functions. It also includes optional sections on Stirling's formula, functions of bounded variation, Riemann–Stieltjes integration, and other topics.

The second part focuses on functions of several variables. It introduces the topological ideas (such as compact and connected sets) needed to describe analytical properties of multivariable functions. This part also discusses differentiability and integrability of multivariable functions and develops the theory of differential forms on surfaces in  $R^n$ .

The third part consists of appendices on set theory and linear algebra as well as solutions to some of the exercises. A full solutions manual offers complete solutions to all exercises for qualifying instructors.

With clear proofs, detailed examples, and numerous exercises, this textbook gives a thorough treatment of the subject. It progresses from single variable to multivariable functions, providing a logical development of material that will prepare students for more advanced analysis-based courses.

## A Course in Real Analysis By Hugo D. Junghenn Bibliography

- Rank: #588832 in Books
- Brand: CRC Press
- Published on: 2015-02-13
- Original language: English
- Number of items: 1
- Dimensions: 1.00" h x 6.10" w x 9.30" l, 2.25 pounds
- Binding: Hardcover
- 613 pages

 [Download A Course in Real Analysis ...pdf](#)

 [Read Online A Course in Real Analysis ...pdf](#)

## Editorial Review

### Review

"... intended for a first course in real analysis. ... It could also be used to support an advanced calculus course. ... The approach is theoretical and the writing rigorously mathematical. There are numerous exercises. ... If a library needs to add to its collection in this area, this book would be a good choice. Summing up: Recommended. Upper-division undergraduates and graduate students."

?D. Z. Spicer, University System of Maryland, USA for *CHOICE*, October 2015

"The book is carefully written, with rigorous proofs and a sufficient number of solved and unsolved problems. It is suitable for most university courses in mathematical analysis."

?*Zentralblatt MATH* 1317

### About the Author

**Hugo D. Junghenn** is a professor of mathematics at The George Washington University. He has published numerous journal articles and is the author of several books, including *Option Valuation: A First Course in Financial Mathematics*. His research interests include functional analysis, semigroups, and probability.

## Users Review

### From reader reviews:

#### Nancy Lowery:

Do you have favorite book? If you have, what is your favorite's book? Book is very important thing for us to know everything in the world. Each book has different aim or maybe goal; it means that guide has different type. Some people experience enjoy to spend their time and energy to read a book. They can be reading whatever they get because their hobby is actually reading a book. Why not the person who don't like examining a book? Sometime, man feel need book once they found difficult problem as well as exercise. Well, probably you will want this A Course in Real Analysis.

#### Adam Sea:

In this period of time globalization it is important to someone to receive information. The information will make a professional understand the condition of the world. The fitness of the world makes the information easier to share. You can find a lot of referrals to get information example: internet, classifieds, book, and soon. You can see that now, a lot of publisher this print many kinds of book. The particular book that recommended for you is A Course in Real Analysis this e-book consist a lot of the information on the condition of this world now. This specific book was represented how do the world has grown up. The dialect styles that writer value to explain it is easy to understand. The actual writer made some exploration when he makes this book. Here is why this book suitable all of you.

**Katherine Herron:**

Beside that A Course in Real Analysis in your phone, it might give you a way to get nearer to the new knowledge or info. The information and the knowledge you might got here is fresh through the oven so don't become worry if you feel like an old people live in narrow village. It is good thing to have A Course in Real Analysis because this book offers for your requirements readable information. Do you at times have book but you rarely get what it's exactly about. Oh come on, that won't happen if you have this in the hand. The Enjoyable arrangement here cannot be questionable, just like treasuring beautiful island. Techniques you still want to miss it? Find this book and read it from today!

**Charlotte Lee:**

As a college student exactly feel bored to be able to reading. If their teacher requested them to go to the library as well as to make summary for some reserve, they are complained. Just minor students that has reading's heart and soul or real their pastime. They just do what the teacher want, like asked to go to the library. They go to at this time there but nothing reading seriously. Any students feel that examining is not important, boring as well as can't see colorful photos on there. Yeah, it is being complicated. Book is very important to suit your needs. As we know that on this period of time, many ways to get whatever you want. Likewise word says, many ways to reach Chinese's country. So , this A Course in Real Analysis can make you feel more interested to read.

**Download and Read Online A Course in Real Analysis By Hugo D. Junghenn #UL6A5JVIS2P**

## **Read A Course in Real Analysis By Hugo D. Junghenn for online ebook**

A Course in Real Analysis By Hugo D. Junghenn Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read A Course in Real Analysis By Hugo D. Junghenn books to read online.

### **Online A Course in Real Analysis By Hugo D. Junghenn ebook PDF download**

**A Course in Real Analysis By Hugo D. Junghenn Doc**

**A Course in Real Analysis By Hugo D. Junghenn Mobipocket**

**A Course in Real Analysis By Hugo D. Junghenn EPub**

**UL6A5JVIS2P: A Course in Real Analysis By Hugo D. Junghenn**