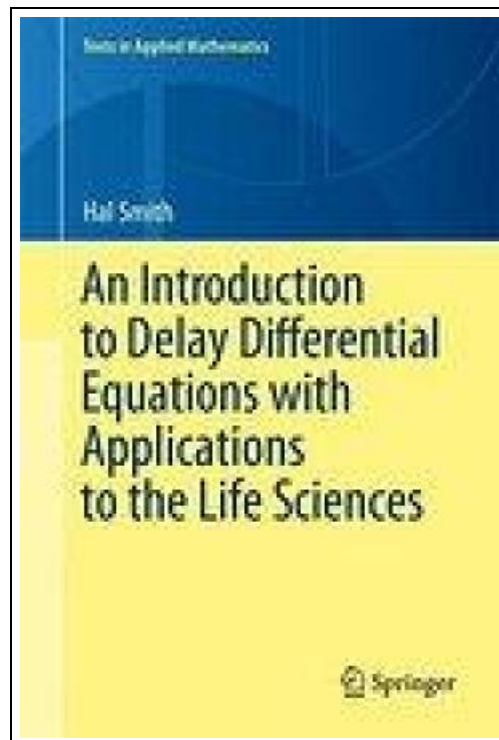


An Introduction to Delay Differential Equations with Applications to the Life Sciences



Filesize: 7.92 MB

Reviews

This composed book is excellent. This really is for all who statte that there had not been a worth reading through. Your life period will probably be change as soon as you total looking over this ebook.
(Cheyanne Barrows)

AN INTRODUCTION TO DELAY DIFFERENTIAL EQUATIONS WITH APPLICATIONS TO THE LIFE SCIENCES**DOWNLOAD**

Springer Dez 2012, 2012. Taschenbuch. Book Condition: Neu. 235x155x10 mm. This item is printed on demand - Print on Demand Titel. Neuware - This book is intended to be an introduction to Delay Differential Equations for upper level undergraduates or beginning graduate mathematics students who have a good background in ordinary differential equations and would like to learn about the applications. It may also be of interest to applied mathematicians, computational scientists, and engineers. It focuses on key tools necessary to understand the applications literature involving delay equations and to construct and analyze mathematical models. Aside from standard well-posedness results for the initial value problem, it focuses on stability of equilibria via linearization and Lyapunov functions and on Hopf bifurcation. It contains a brief introduction to abstract dynamical systems focused on those generated by delay equations, introducing limit sets and their properties. Differential inequalities play a significant role in applications and are treated here, along with an introduction to monotone systems generated by delay equations. The book contains some quite recent results such as the Poincare-Bendixson theory for monotone cyclic feedback systems, obtained by Mallet-Paret and Sell. The linear chain trick for a special family of infinite delay equations is treated. The book is distinguished by the wealth of examples that are introduced and treated in detail. These include the delayed logistic equation, delayed chemostat model of microbial growth, inverted pendulum with delayed feedback control, a gene regulatory system, and an HIV transmission model. An entire chapter is devoted to the interesting dynamics exhibited by a chemostat model of bacteriophage parasitism of bacteria. The book has a large number of exercises and illustrations. Hal Smith is a Professor at the School of Mathematical and Statistical Sciences at Arizona State University. This book is intended to be an introduction to Delay...

[Read An Introduction to Delay Differential Equations with Applications to the Life Sciences Online](#)[Download PDF An Introduction to Delay Differential Equations with Applications to the Life Sciences](#)

Other eBooks



DK Readers Day at Greenhill Farm Level 1 Beginning to Read

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.8in. x 5.7in. x 0.2in. This Level 1 book is appropriate for children who are just beginning to read. When the rooster crows, Greenhill Farm springs...

[Save](#) [Document](#)

»



California Version of Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Pearson, United States, 2015. Loose-leaf. Book Condition: New. 10th. 249 x 201 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

[Save](#) [Document](#)

»



Who Am I in the Lives of Children? an Introduction to Early Childhood Education, Enhanced Pearson Etext with Loose-Leaf Version -- Access Card Package

Pearson, United States, 2015. Book. Book Condition: New. 10th. 250 x 189 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

[Save](#) [Document](#)

»



Who Am I in the Lives of Children? an Introduction to Early Childhood Education with Enhanced Pearson Etext -- Access Card Package

Pearson, United States, 2015. Paperback. Book Condition: New. 10th. 251 x 203 mm. Language: English . Brand New Book. NOTE: Used books, rentals, and purchases made outside of Pearson If purchasing or renting from companies...

[Save](#) [Document](#)

»



DK Readers Animal Hospital Level 2 Beginning to Read Alone

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.9in. x 5.8in. x 0.1in. This Level 2 book is appropriate for children who are beginning to read alone. When Jack and Luke take an injured...

[Save](#) [Document](#)

»