Record Nr.	UNINA9910437877503321
Autore	Quirk Thomas J
Titolo	Excel 2010 for Biological and Life Sciences Statistics : A Guide to Solving Practical Problems / / by Thomas J Quirk, Meghan Quirk, Howard Horton
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2013
ISBN	1-4614-5779-3
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (247 p.)
Disciplina	005.54
Soggetti	Statistics
	Statistics for Life Sciences, Medicine, Health Sciences
	Statistics and Computing/Statistics Programs
	Statistics, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Excel 2010 for Biological and Life Sciences Statistics; Preface; Acknowledgments; Contents; 1 Sample Size, MeanMean, Standard DeviationStandard deviation, and Standard Error of the MeanMean; 1.1MeanMean; 1.2Standard DeviationStandard deviation; 1.3 Standard Error of the MeanMean; 1.4Sample SizeSample size, MeanMean, Standard DeviationStandard deviation, and Standard Error of the MeanMean; 1.4.1 Using the Fill/Series/Columns CommandsFill/Series/Columns commands; 1.4.2 Changing the Width of a Colum; 1.4.3 Centering Information in a Range of Cells 1.4.4 Naming a Range of CellsNaming a range of cells1.4.5 Finding the Sample SizeSample size Using the =COUNT Function; 1.4.6 Finding the MeanMean Score Using the =AVERAGE Function; 1.4.7 Finding the Standard DeviationStandard deviation Using the =STDEV Function; 1.4.8 Finding the Standard Error of the MeanMean; 1.4.8.1 Formatting NumbersFormatting numbers in Number Format (2 Decimal Places); 1.5Saving a SpreadsheetSaving a spreadsheet; 1.6Printing a SpreadsheetPrinting a spreadsheet 1.7Formatting NumbersFormatting numbers in Currency FormatFormatting numbersFormatting numbers in Currency FormatFormatting numbersFormatting numbers in Sumber Format (3 Decimal Formatting NumbersFormatting numbers in Number Format (3 Decimal

1.

	Places); 1.9End-of-Chapter Practice Problems; References; 2 Random Number Generator; 2.1Creating Frame NumbersRandom number generatorframe numbers for Generating Random Numbers; 2.2 Creating Random Numbers in an Excel Worksheet; 2.3Sorting Frame NumbersRandom number generatorframe numbers into a Random Sequence; 2.4Printing an Excel File so that All of the Information Fits onto One Page 2.5End-of-Chapter Practice Problems3 Confidence Interval About the Mean Using the TINV Function and Hypothesis Testing; 3.1Confidence Interval About the MeanConfidence interval about the mean; 3.1.1 How to Estimate the Population MeanMean; 3.1.2 Estimating the Lower LimitConfidence interval about the meanupper limit of the 95 Percent Confidence Interval About the MeanConfidence interval about the mean; 3.1.3 Estimating the Confidence Interval for the Chevy Impala in Miles Per Gallon 3.1.4 Where Did the Number "1.96" Come From?3.1.5 Finding the Value for t in the Confidence Interval Formula; 3.1.6 Using Excel's TINV Function to Find the Confidence Interval About the MeanConfidence interval about the mean; 3.1.7 Using Excel to find the 95 % Confidence Interval about the mean; 3.2Hypothesis TestingHypothesis testing; 3.2.1 Hypotheses Always Refer to the Population of People, Plants, or Animals that you are Studying; 3.2.2 The Null HypothesisHypothesis testingnull hypothesis and the Research (Alternative) Hypothesis
	3.2.2.1 Determining the Null HypothesisHypothesis testingnull hypothesis and the Research HypothesisHypothesis testingresearch hypothesis When Rating Scales are Used
Sommario/riassunto	This is the first book to show the capabilities of Microsoft Excel to teach biological and life sciences statistics effectively. It is a step-by-step exercise-driven guide for students and practitioners who need to master Excel to solve practical science problems. If understanding statistics isn't your strongest suit, you are not especially mathematically-inclined, or if you are wary of computers, this is the right book for you. Excel, a widely available computer program for students and managers, is also an effective teaching and learning tool for quantitative analyses in science courses. Its powerful computational ability and graphical functions make learning statistics much easier than in years past. However, Excel 2010 for Biological and Life Sciences Statistics: A Guide to Solving Practical Problems is the first book to capitalize on these improvements by teaching students and managers how to apply Excel to statistical techniques necessary in their courses and work. Each chapter explains statistical formulas and directs the reader to use Excel commands to solve specific, easy-to-understand science problems. Practice problems are provided at the end of each chapter with their solutions in an appendix. Separately, there is a full Practice Test (with answers in an Appendix) that allows readers to test what they have learned. Includes 162 illustrations in color Suitable for undergraduates or graduate students.