1. Record Nr. UNINA9910787405703321 Autore Jenkins Stephen H. Titolo Tools for critical thinking in biology / / Stephen H. Jenkins Pubbl/distr/stampa Oxford, [England]:,: Oxford University Press,, 2015 ©2015 **ISBN** 0-19-998105-1 Descrizione fisica 1 online resource (369 p.) Disciplina 570.72 Biology - Research - Philosophy Soggetti Causation Critical thinking 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 Discovery and causation -- Observations as evidence -- From observations to data -- Experiments: the gold standard for research --Correlations, comparisons, and causation -- The diverse use of models in biology -- Genes, environments, and the complexity of causation --From causes to consequences: considering the weight of evidence --Science as a social process -- Critical thinking about climate change. Sommario/riassunto The American Association for the Advancement of Science's report on Vision and Change in Undergraduate Biology Education suggests that instructors ""can no longer rely solely on trying to cover a syllabus packed with topics"" but rather should ""introduce fewer concepts but present them in greater depth."" They further suggest that the principles embodied in a set of core concepts and competencies should be the basis for all undergraduate biology courses, including those

designed for nonmajors. The theme of Tools for Critical Thinking in

Biology will be the first and most fundamental of these