



THE NEW YORK CITY DEPARTMENT OF EDUCATION

JOEL I. KLEIN, *Chancellor*

Carmen Fariña, Deputy Chancellor for Teaching & Learning

Laura Kotch, *Executive Director*

Office of Curriculum and Professional Development

Julia A. Rankin Ph.D., Director

Department of the Sciences

52 Chambers Street, Room 208

New York, NY 10007

☎ (212) 374-0465 ▪ Fax: (212) 374-5901/5763 ▪ ✉ jrankin2@nycboe.net

High School Scope and Sequence Living Environment Regents

District 75

New York City Department of Education

High School Scope and Sequence - Science Regents

Working Draft

Scientific Inquiry (e.g. asking questions, making discoveries, gathering data, analyzing explanations, and communication) is an integral component of this course

LIVING ENVIRONMENT – District 75 LE is a 2-year course unless students are capable of passing in one year

First Term September - January		Second Term February- June		
Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Scientific Inquiry (20 days) <ul style="list-style-type: none"> • The role of scientific inquiry in studying biology • The methods of science • Forensic Science investigations • Problem-based learning 	Origin of Life (3 days) <p>Geologic formation of Earth</p> <p>Chemical nature of earth</p> <p>Formation of first cells from molecules</p> <p>The nature of prokaryotes</p>	Ecology (40 days) <ul style="list-style-type: none"> • Population Biology • Ecosystems • Origin and distribution of communities <p style="text-align: center;">RCT Review</p>	Organization and Patterns in Life (40 days) <ul style="list-style-type: none"> • Cell structure • Cell Physiology • Cell Chemistry • Photosynthesis • Respiration • Diffusion and Osmosis • Mitosis <p style="text-align: center;">RCT Review</p>	Homeostasis and Immunity (50 days) <ul style="list-style-type: none"> • Body system overview • Homeostasis and feedback systems • Immune response <p style="text-align: center;">RCT Review</p>

Second Year – Third Term Sept –January		Fourth Term February -June		
Unit 6	Unit 7	Unit 8	Unit 9	
Reproduction and Development (30 days) <ul style="list-style-type: none"> • Meiosis • Reproductive systems • Fertilization • Development • Stem cells 	Genetics and Biotechnology (50 days) <ul style="list-style-type: none"> • Mendel overview • DNA/ RNA • Protein synthesis • Diseases • Mutations • Bioengineering • Bioethics <p style="text-align: center;">RCT Review</p>	Evolution (30 days) <ul style="list-style-type: none"> • Natural selection • Evidence <p style="text-align: center;">RCT Review</p>	Human Influences on the Environment (30 days) <ul style="list-style-type: none"> • Positive influences • Negative influences <p style="text-align: center;">RCT Review</p>	Review (20 days) <ul style="list-style-type: none"> • First term topics • Regents exam prep <p style="text-align: center;">Differentiated RCT & Regent Review</p>

Scientific Inquiry (e.g. asking questions, making discoveries, gathering data, analyzing explanations, and communication) is an integral component of this course