13.7.1 BACHELOR OF SCIENCE (B.SC.)

Entry Requirements
A student wishing to study B.Sc. must satisfy the minimum university requirements and School of Pure and Applied Sciences regulations. A student must have C+ in Biology or Biological Sciences, PLUS at least a C+ in ANY TWO of the following subjects; Physical Sciences, Physics, Chemistry, Geography and Agriculture, or at least 2 principals passes one which must be Biology in the Kenya Advanced Certificate of Education (KACE), or C plain in KCSE (or Division III KCE/EACE) with a credit pass at diploma level in any of the following areas: Education (Biology), Applied Biology, Agriculture, Wildlife or Wetlands from an institution recognized by the University Senate or Mean grade of C- (minus) at KCSE and progressed from certificate to Diploma at Kenyatta University or any other recognized/accredited Institutions.

Examination
University regulations on examinations shall apply.

Certification
Graduates of this programme will be awarded a Bachelor of Science degree.

Programme Structure
In each year of study a student is required to take courses in the School of Pure & Applied Sciences amounting to 12 units. All students are also required to take four common University courses, which can be taken at any time before a student graduates.
In the first year the combination of courses to be taken in the Department of Plant Sciences is the same for all students. In the second year a student must take four courses (three of which are core) as well as four courses in each of two other Science departments. In the third and fourth years, the combination may vary as shown below:

3:3:1:1 Major – Twelve PS units in each of the third and fourth years.
3:3:2:1 Major – Eight PS units and four units from another department in the third year, and twelve PS units in the fourth year.
3:3:2:2 Major – Eight PS units and four units from another department in each of the third and fourth years.
3:3:2:2 Regular – Six PS units and six units from another department in each of the third and fourth years.
3:3:2:2 Minor – Four PS units and eight units from another department in each of the third and fourth years.
3:3:2:0 Minor – Four PS units and eight units from another department in the third year, and no PS units in the fourth year.

The 3:3:1:1 and 3:3:2:1 Major programmes will be offered at the discretion of the department.

Unless otherwise stated each course is equivalent to one unit.

University Common Units
Compulsory:
UCU100: Communication Skills
UCU 103: Introduction to Critical and Creative Thinking

Choose One:
UCU 101: Development Studies
UCU104: Introduction to Entrepreneurship
UCU 106: Diversity, Ethics and Citizenship

Level 100
Core courses
SBT 100: Cellular Basis of Life
SBT 101: Survey of the Plant Kingdom
SBT 102: Plant Morphology and Anatomy.
SBT 103: Botanical Techniques

Level 200
SBT 200: Plant Ecology (core)
SBT 201: Plant Function (core)
SMB 200: General Microbiology (core)
SBT 204: Pteridophytes and Bryophytes
SBT 205: Phytopathogens

Level 300
SBT 300: Cell Biology and Genetics
SBT 301: Taxonomy of Higher Plants
SBT 302: Mycology
SBT 303: Principles of Plant Pathology
SBT 304: Biosystematics and Palynology
SMB 300: Bacteriology
SBT 306: Economic Botany
SBT 307: Biostatistics (compulsory for Botany major students)
SBT 308: Plant Growth and Development
SBT 309: Advanced Plant Ecology
SBT 310: Plant Biochemistry and Physiology

Level 400 (Choose any four units)
SBT 400: Research Project (2 units over 2 semesters)
SBT 401: General Genetics
SBT 402: Phycology
SBT 403: Ecophysiology
SBT 405: Morphogenesis and Developmental Anatomy
SBT 407: Arid Land Ecology
SBT 408: Forest Ecology
SBT 410: Marine Botany
SBT 411: Aquatic Botany
SBT 413: Environmental Microbiology
SBT 418: Microbial Genetics
SBT 419: Cytogenetics and Molecular Biology
SBT 420: Biotechnology

SBT 421: Plant Breeding
SBT 422: Virology
SBT 423: Diagnosis and Control of Plant Diseases
SBT 424: Pesticides