

**CURRICULUM** 

This Degree Programme Was approved by the Commission for University Education on:

Mutaison

Authorized Signature

ON:

BACHELOR OF SCIENCE

IN

BIOMEDICAL SCIENCES (BSc. BMS)

SUBMITTED TO

THE
COMMISSION FOR UNIVERSITY
EDUCATION

FEBRUARY, 2015



D.U App prog 2015

#### **CHAPTER TWO**

#### 2.0 INTRODUCTION

### 2.1 Background

According to the Daystar University Strategic Plan of 2005 - 2010, a need for science majors was emphasized and in particular those sciences that would solve some of the problems encountered by the majority in our society. A survey that was done in 2001 by the Faculty of Science in Daystar University revealed that there was need for graduates in the area of biomedical, engineering and nursing sciences. The Nursing program has since been launched. The proposed Bachelor of Science in Biomedical Science (BSc. BMS) is the second step towards establishing a School of Health Sciences in Daystar University. This program is designed to provide a strong foundation in the biomedical sciences for students who aspire to pursue medical research as a career.

#### 2.2 Rationale

The BSc. BMS is a program that aims at meeting the science research needs of our society as stipulated in the 'Millennium Development Goals' and the Kenyan 'Vision 2030'. The program is designed towards developing scientists who are competent and equipped with relevant current knowledge, right attitudes and technical skills that will enable them to carry out quality medical research under minimum supervision in modern laboratories and research institutions. The rapidly changing biomedical procedures and techniques which graduates require in the area of expertise were considered while developing the program. To this end, the proposed content is current and the courses included will equip a student with multidisciplinary approach to modern medical research. The ultimate goal is to encourage young Kenyans to develop interest in biomedical research at an early stage. The proposed program will provide a wide base from which they can specialize. This will enable them to participate in the development of commercial medical products, qualifying for post-graduate studies. Highly qualified researchers tend to attract funding for their research projects.

By integrating Christian faith in teaching and learning, Daystar University seeks to train biomedical scientists who will be individuals of high moral standards who can work in varied biomedical professional bodies.

### 2.3 Statement of Philosophy of the BMS Program

In line with the University's philosophy, we seek to provide quality training and research that are indigenous and developed through local initiatives to solve health related problems. In addition, the Biomedical Science program is to offer service to humanity based on Christian principles and values.

## 2.4 Learning Outcomes

Upon completion of the course, the learner will be able to:-

- 1. apply the current basic biomedical techniques in characterization and diagnostic procedures in research;
- 2. plan and implement biomedical research;
- 3. collect and interpret medical data and make evidence based conclusions;
- 4. utilize effective communication skills to interact with other professionals in biomedical field;
- 5. demonstrate appropriate professional behavior as required by the medical code of ethics;
- 6. acquire admission for further training at postgraduate level in recognized universities both locally and internationally.

# 2.5 Admission Requirements for BMS Program

The university shall admit for the BMS degree program, such candidates as shall be accepted by the Senate as being academically qualified, having met the basic entry requirements, and those who accept the university's Christian mission and philosophy as provided under Sections 4 to 7 of the university charter, without regard or preference to gender, ethnic origin or race being imposed as a condition for admission. The BMS degree will be offered for students who wish to pursue the program to completion. The University may consider other criteria approved by Senate that enhances quality.

### 2.5.1 Academic Qualification

a)	K.C.S.E, Mean grade of C+or.	its equivalent;
	English;at least	st <b>C</b> +
	Mathematics;,	C+
	Chemistry or Physics or Physical Sciences;,	<b>C</b> +
	Biology or Biological Sciences;,	<b>C</b> +

b) K.A.C.E: 2 or More Principals, with ONE in Biology and ONE in Chemistry or its equivalent.

# 2.5.2 Upgrade from Diploma

Although the program is primarily meant for those leaving secondary school it is also possible that applicants who hold a diploma in Applied Biology or diploma in Medical Laboratory Technology from recognized post secondary institutions including National polytechnics and Institutes of technology, can be admitted and allowed to upgrade their diploma to a degree in BMS. They must meet all the entry requirements as stated above. They can be exempted from some courses based on their diploma in accordance with the standard policy of Daystar University for exemptions. They must demonstrate that the course content was equivalent and that they have achieved an overall Distinction or Credit at the Diploma level.

# 2.6 Assessment of the students' performance

The University's common regulations for undergraduate examinations shall apply. The continuous assessments comprising of written tests, assignments, fieldwork