

# **AQA GCSE BIOLOGY**

## **Year 11 – Autumn Term**

### **CONTENT:**

#### **B10 The Human nervous system and B11 Hormonal control**

Cells in the body can only survive within narrow physical and chemical limits. They require a constant temperature and pH as well as a constant supply of dissolved food and water. In order to do this the body requires control systems that constantly monitor and adjust the composition of the blood and tissues. These control systems include receptors which sense changes and effectors that bring about changes. In this section we will explore the structure and function of the nervous system and how it can bring about fast responses. We will also explore the hormonal system which usually brings about much slower changes. Hormonal coordination is particularly important in reproduction since it controls the menstrual cycle. An understanding of the role of hormones in reproduction has allowed scientists to develop not only contraceptive drugs but also drugs which can increase fertility.

**10.1 Principles of homeostasis; 10.2 The structure and function of the human nervous system; 10.3 Reflex actions; 10.4 The brain; 10.5 The eye; 10.6 Common problems of the eye.**

**11.1 Principles of hormonal control; 11.2 The control of blood glucose levels; 11.3 Treating diabetes; 11.4 The role of negative feedback; 11.5 Human reproduction 11.6 Hormones and the menstrual cycle ; 11.7 The artificial control of fertility; 11.8 Infertility treatments; 11.9 Plant hormones and responses; 11.10 Using plant hormones.**

### **Recommended online resources:**

**Kerboodle**- Digital Textbook – w:kerboodle.com u:initialsurname  
p:initialsurname inst.code:yh7 – the individual lesson breakdown is here.

**BBC Bitesize**: KS4 Science AQA – then find the relevant topics

**YOUTUBE**: 'GCSESCIENCELESSONS' then search for the topic of interest

**Oak National Academy**: Lessons available linked to above topics.

**Google Classroom**: class code details will be released using Class Charts