

British Biology Olympiad syllabus

<p>20% Cell Biology</p> <ul style="list-style-type: none"> ▪ Microbiology ▪ Biotechnology <p>Structure and function of cells:</p> <ul style="list-style-type: none"> ▪ chemical components ▪ organelles ▪ cell metabolism ▪ protein synthesis ▪ transport through membranes ▪ mitosis and meiosis 	<p>25% Animal Anatomy & Physiology (emphasis on vertebrates)</p> <p>Structure and function of tissues and organs involved in:</p> <ul style="list-style-type: none"> ▪ digestion and nutrition ▪ circulation ▪ reproduction and development ▪ regulation (neural and hormonal) ▪ respiration ▪ excretion ▪ immunity
<p>15% Plant Anatomy & Physiology (emphasis on seed plants)</p> <p>Structure and function of tissues and organs involved in:</p> <ul style="list-style-type: none"> ▪ photosynthesis, transpiration and gas exchange ▪ transport of water, minerals and assimilates ▪ growth and development ▪ reproduction (ferns and mosses included) 	<p>5% Ethology</p> <ul style="list-style-type: none"> ▪ behavioural systems ▪ conflict behaviour ▪ causes of behaviour ▪ learned behaviour <hr/> <p>10% Ecology</p> <ul style="list-style-type: none"> ▪ ecosystems ▪ bio-geochemical cycles ▪ population structure and dynamics ▪ biosphere and man ▪ food relationships ▪ energy flow ▪ succession
<p>5% Biosystematics</p> <ul style="list-style-type: none"> ▪ structure and function ▪ evolutionary and ecological relationships among typical ▪ organisms in major groups (Phyla and Classes only) 	<p>20% Genetics & Evolution</p> <ul style="list-style-type: none"> ▪ variation: mutation and modification ▪ Mendelian inheritance ▪ multiple allelism, recombination, sex linkage ▪ Hardy-Weinberg principle ▪ mechanism of evolution