

ST. JOSEPH'S COLLEGE

Department of Biology

Secondary 5 (2024-25)

Teaching Syllabus (NSE topics included)

S5	Content	Remarks
1 st Term	- Plant reproduction (Aristo Bk2A Ch13)	<i>Knowledge needing attention:</i> <ul style="list-style-type: none"> - Asexual reproduction occurs in flowering plants - Self-pollination is a form of sexual reproduction <i>Suggested practical:</i> <ul style="list-style-type: none"> - Dissection of flower
	- Human reproduction (Aristo Bk2A Ch14) - Hormonal control of reproductive cycle (Aristo Bk5 Ch35)	<i>Knowledge needing attention:</i> <ul style="list-style-type: none"> - Roles of reproductive hormones in different circumstances
	- Growth, development and tropism (Aristo Bk2A Ch15, Bk2B Ch16)	<i>Knowledge needing attention:</i> <ul style="list-style-type: none"> - * include detecting light by plants (tropism) <i>Special exam skills:</i> <ul style="list-style-type: none"> - Revision: drawing conclusions from experimental results (tropism experiments)
	- Detecting the environment (Aristo Bk2B Ch16)	<i>Suggested practical:</i> <ul style="list-style-type: none"> - Dissection of ox eye
2 nd Term	- Coordination (Aristo Bk2B Ch17,19)	<i>Knowledge needing attention:</i> <ul style="list-style-type: none"> - * also include regulation of blood glucose level as example of hormonal coordination
	- Support and movement (Aristo Bk2B Ch18)	<i>Knowledge needing attention:</i> <ul style="list-style-type: none"> - Identify muscles controlling movement across a joint
	- Homeostasis (Aristo Bk2B Ch19, Bk5 Ch32&33)	<i>Knowledge needing attention:</i> <ul style="list-style-type: none"> - * include osmoregulation and thermoregulation in elective 1 - Difference between “reabsorb larger proportion of water” and “reabsorb more water” in osmoregulation
	- Health, defence and diseases (Aristo Bk3 Ch23-25)	<i>Knowledge needing attention:</i> <ul style="list-style-type: none"> - Differentiate “immune response” and “immunity” NSE topic: <ul style="list-style-type: none"> - Biological safety: prevention of infectious diseases

- Molecular genetics (Aristo Bk4 Ch27)	<i>Knowledge needing attention:</i> - (Highlight importance and linkage to biotechnology)
- Basic genetics (Aristo Bk4 Ch26)	<i>Knowledge needing attention:</i> - Use the iconic pattern shown in a pedigree to solve genetic problems - How mutation in DNA leads to changes in phenotype (applying knowledge in molecular genetics) <i>Special exam skills:</i> - Deduction