

Science Recommendations For Course Selection

These are RECOMMENDATIONS ONLY
and are based on student data
collected over the years.

Please see the course catalog for
descriptions of all courses.

Tompkins High School Recommended Science Course Selections 2023-2024

Foundation High School Program Graduation Plan requires:

Biology and one credit from IPC or Chemistry or Physics; and one additional science course = **3 science credits**

Foundation High School Program + Endorsement Graduation Plan requires:

Biology and one credit from IPC, Chemistry, or Physics; and 2 additional/advanced science courses = **4 science credits**

Foundation High School Program + **STEM** Endorsement Graduation Plan requires:

Biology, Chemistry, Physics, and 1-2 additional/advanced science courses = **4-5 science credits** (see Course Catalog for sequences)

Note: Grade values assigned are only recommendations, due to open enrollment. Check the Course Catalog for prerequisites.

Current Science Course	Recommended 2023-2024 Science Course	
Academic Biology	<p><u>ACA Chemistry</u></p> <ul style="list-style-type: none"> ≥80% in Alg I and ACA Bio <p><u>Integrated Physics and Chemistry (IPC)</u></p> <ul style="list-style-type: none"> Must take IPC if failed Alg I and/or Bio (Prerequisites for Chem) <80% in Alg I/or ACA Bio <p><u>KAP Chemistry</u></p> <ul style="list-style-type: none"> >95% in ACA Bio and Alg I (>90% in Geom) Should be enrolled in KAP Geom, (Not Aca Geom) 	
KAP Biology	<p><u>KAP Chemistry</u></p> <ul style="list-style-type: none"> ≥80% in KAP Bio ≥80% in KAP Geom or ≥90% in ACA Geom or ≥95% in Alg I Concurrent enrollment in Alg II & KAP Chem is strongly recommended <p><u>ACA Chemistry</u></p> <ul style="list-style-type: none"> ≥80% in Alg I <p><u>Integrated Physics and Chemistry (IPC)</u></p> <ul style="list-style-type: none"> <80% in Alg I Must take IPC if failed Alg I and/or Bio (Prerequisites for Chem) 	
Integrated Physics and Chemistry (IPC)	Not yet earned credit for Biology	Earned credit for Biology
	<u>ACA Biology</u>	<p><u>ACA Chemistry</u></p> <ul style="list-style-type: none"> ≥80% in Alg I or ≥75% in Geom <p><u>Aquatic Science or Environmental Systems</u></p> <ul style="list-style-type: none"> <80% in Alg I
Academic Chemistry	<p><u>ACA Physics (preferred, if student will enroll in Algebra II or higher math course)</u></p> <ul style="list-style-type: none"> ≥80% in ACA Chem Geom is a prerequisite <p><u>Aquatic Science (preferred, if student will enroll in Math Models or Algebraic Reasoning)</u></p> <ul style="list-style-type: none"> <80% in Chem <p><u>Forensic Science</u></p> <ul style="list-style-type: none"> ≥80% in Chem; concurrent enrollment in Phys is suggested <p><u>Anatomy & Physiology</u></p> <ul style="list-style-type: none"> ≥80% in Chem <p><u>Dual Credit Anatomy & Physiology</u></p> <ul style="list-style-type: none"> ≥85 in Chem <p><u>AP Physics 1 (very rare)</u></p> <ul style="list-style-type: none"> ≥95% in ACA Chem and ACA Geom or Alg II ≥85% in KAP Alg II Recommended enrollment in Pre-Calc 	

KAP Chemistry	<p><u>AP Physics 1</u></p> <ul style="list-style-type: none">• ≥85% in KAP Chem and KAP Geom or KAP Alg II (>95% in ACA Algebra II)• Recommended enrollment in Pre-Cal (KAP Pre-Cal preferred) <p><u>ACA Physics</u> (recommend if score criteria above is not met)</p> <p><u>AP Chem</u></p> <ul style="list-style-type: none">• Must have had KAP Chem and Alg II• >90% in KAP Chem and Alg II <p><u>AP Biology</u></p> <ul style="list-style-type: none">• ≥80% in KAP Bio (or >95% in ACA Bio) and ≥80% in Chem• Chem is prerequisite <p><u>AP Environmental Science</u></p> <ul style="list-style-type: none">• ≥80% in KAP Bio (or ≥90% in ACA Bio) and ≥80% in Chem <p>**See below for additional 3rd & 4th year elective courses</p>		
Academic Physics	<p><u>3rd & 4th year and/or Electives:</u></p> <ul style="list-style-type: none">➤ <u>Aquatic Science:</u> Biology and IPC, Chem or Phys are prerequisites➤ <u>Forensic Science:</u> Bio and Chem are prerequisites➤ <u>Anatomy& Physiology:</u> Bio and Chem are prerequisites➤ <u>Advanced Animal Science*</u>: Chem or IPC are prerequisites➤ <u>Environmental Systems:</u> Bio and IPC, Chem or Phys are prerequisites➤ <u>Earth and Space:</u> Bio and Chem, plus an additional science course which may be taken concurrently; 3 math credits, one of which may be taken concurrently. <p><u>Dual Credit Anatomy & Physiology</u></p> <p><u>AP Courses:</u></p> <ul style="list-style-type: none">➤ <u>AP Biology</u><ul style="list-style-type: none">• ≥80% in KAP Bio (or >95% in ACA Bio) and ≥80% in Chem• Chem is prerequisite➤ <u>AP Chemistry</u><ul style="list-style-type: none">• Must have had KAP Chem and Alg II• >90% in KAP Chem and Alg II➤ <u>AP Environmental Science</u><ul style="list-style-type: none">• ≥80% in KAP Bio (or ≥90% in ACA Bio) and ≥80% in Chem➤ <u>AP Physics 1</u><ul style="list-style-type: none">• ≥90% in Academic Physics		
AP Physics I	<p><u>AP Courses:</u> AP Bio, AP Chem, AP Env. Science</p> <p><u>AP Physics II</u> Recommended ≥75% in AP Physics I</p> <p><u>Other science courses:</u> Anatomy & Physiology, Forensic Science, Advanced Animal Science*, Environmental Systems, Aquatic Science, Earth and Space Science</p>		
3 rd /4 th year Electives Aquatic Science, Environmental Systems, Forensic Science, Anatomy & Physiology	Not yet earned credit for Chemistry		Earned credit for Chemistry
	<p><u>Academic Chemistry</u></p> <p><u>Aquatic Science</u></p> <p><u>Advanced Animal Science*</u></p>		<ul style="list-style-type: none">• No Science• Academic Physics• Aquatic Science• Environmental Systems• Forensic Science• ≥80% in Bio and Chem Anatomy & Physiology• ≥80% in Bio and Chem Advanced Animal Science*• Earth and Space Science

***Students must consider CTE prerequisites:** Algebra I and Geometry; Biology and IPC or Chemistry; at least one of the following Ag courses: Principles of Ag, Livestock Production, Small Animal Management, Wildlife and Fisheries, or Equine Science