

Courses listed within this plan are only recommended coursework and should be individualized to meet your educational and career goals.



Milford High School - Great Bay Community College/Biotechnology  
Plymouth State University/Biotechnology



Career Pathway Plan of Study

**Bold** – College Entrance Requirement  
Black – High School Requirement

***Italics, Bold & Underlined*** –  
Transcripted Dual Enrollment Credit

	Grade	English/ Language Arts	Math	Science	Social Studies /Sciences	Other Required Courses (R) Recommended Electives (E)	*Career and Technical Courses and/or Degree Major Courses	SAMPLE Occupations Relating to This Pathway	
<b>S E C O N D A R Y</b>	9	<b>English 9</b>	<b>Algebra I</b>	<b>Physical Science</b> -or- Biology (H)	<b>American Studies 9</b>	Wellness I (R) World Lang. (E)	Computer Studies  Applied Business Applications	<ul style="list-style-type: none"> <li>▶ Process Technician</li> <li>▶ Lab Technician/Analyst</li> <li>▶ Quality Control Technician</li> <li>▶ Metrologist</li> <li>▶ Research Assistant</li> <li>▶ Quality Assurance</li> <li>▶ Validation Specialist</li> <li>▶ Genomics</li> <li>▶ Bioinformatics</li> <li>▶ Forensic Scientist</li> <li>▶ Management</li> <li>▶ University Professor</li> <li>▶ Manufacturing Associate</li> <li>▶ Pharmaceutical Scientist</li> </ul>	
	10	<b>English 10</b>	<u>Select two:</u> Geometry <b>Algebra II</b> Practical/Adv. Trig.	Biology	<b>American Studies 10</b>	Fine Arts (R) World Lang. (E)	Applied Business Applications		
	11	<b>English 11</b>	Applications of Math Algebra III/Trig. AND/OR <b><u>Probability/Stat.</u></b>	<b><u>Anatomy &amp; Physiology I, II</u></b>  <b>Chemistry</b> OR <b><u>AP Chemistry</u></b> <b>(4)*</b>	World Studies	Wellness II (R) World Lang. (E) OR Intro to Social Science (E) Environmental Science (E) Physics (E)	MICROBIOLOGY: PRINCIPLES & PRACTICES  <b><u>Applied Business Applications</u></b>  <b><u>Biotechnology/Genetics (A or H)</u></b>		
	12	<b>English 12</b>	Algebra III/Trig. AND/OR Pre-Calculus	<b><u>Anatomy &amp; Physiology I, II</u></b>  Chemistry OR <b><u>AP Chemistry*</u></b>	Social Studies Elective	<b><u>College Composition (E)</u></b> World Lang. (E) OR Intro to Social Science (E) Environmental Science (E) Conceptual Physics (E)	BIOTECHNOLOGY ELO (Extended Learning Opportunity)  Career Focus Internship		
<b>P O S T S E C O N D A R Y</b>	Associate Degree: Biotechnology, Great Bay Community College, Stratham								
	13	College Composition I (5) Writing Technical Documents	Intermediate Algebra(5)	General Biology (I) &II <b><u>General Chemistry</u></b> I & II *(Microbiology)	Social Science Elective	Introduction to Computers (R)		<p><b>Notes:</b> * AP Chem may replace NHCTC General Chemistry 1 with score of 3 or higher.</p> <p>Accuplacer Scores Required: English: Writeplacer Score of 8 or higher and Reading Score between 57 and 75. Math: Elementary Algebra Score greater than or equal to 76</p> <p><b><i>Recommended that students participate in Job Shadowing opportunities and Career Focus Internship course during Senior year.</i></b></p> <p><b><u>*RUNNING START COLLEGE CREDITS AVAILABLE FROM ALL COURSES IN ITALICS, BOLD AND UNDERLINED.</u></b></p>	
	14		Probability & Statistics	Organic Chemistry	Ethics or Bioethics	Foreign Language/Humanities/Fine Arts Elective (R) Technical Elective (R)	Biotech Experience I: Discovery Research Biotech Experience II: Biomanufacturing		
	Plymouth State University Bachelor of Science Degree: Biotechnology								
	15		Any two of : Elementary Functions, Applied Calculus 1 or 2, Calculus 1 or 2	Genetics Cell Structure & Function Physics 1 & 2	Creative Thought Directions Past & Present Directions Self & Society Directions	BI/CH Major Electives (R)	Biotechnology Either BI or CH Introduction to Research		
16			BioChemistry I Organic Chemistry 2	Diversity Connection Global Awareness Connection	Integration Connection (R) Wellness Connection (R) 3 Electives	Senior Research			