

# Reading Your Course Catalog

## Biotechnology (Yearlong)

Grades 11-12

Prereq: Biology and Chemistry/Honors Chemistry

Credit: Lab Science

Biotechnology is designed to give students a comprehensive introduction to the scientific concepts and laboratory research techniques currently used in the field of biotechnology. Students attain knowledge about the field of biotechnology and deeper understanding of the biological concepts used. In addition, students develop the laboratory, critical thinking, and communication skills currently used in the biotechnology industry. Furthermore, students will explore and evaluate career opportunities in the field of biotechnology through readings, laboratory experiments, class discussions, research projects, guest speakers, and possibly workplace visits.

## Personalized Pathway Graduation Options

Class of 2020 and beyond

“Personalized Pathway Requirements are related courses that lead to a specific post high school career or educational outcome chosen by the student based on the student’s interest and High School and Beyond Plan, that may include Career and Technical Education (CTE) and are intended to provide a focus for the student’s learning.”

The pathways below show examples of the courses offered at MHS that may satisfy these options.

<p><b>OPTION 1</b> <b>4 YEAR COLLEGE BOUND</b></p>	<p>Follow the graduation requirements listed in your catalog including 2 years of the same world language plus one extra art credit. Concentrate on electives from a pathway specific to your chosen college major.</p>
<p><b>OPTION 2</b> <b>CAREER or TECHNICAL EDUCATION or MILITARY</b></p>	<p>Choose a CTE pathway for the career you would like to have after graduation or two year college program or military service. (CTE sequence requires a CTE dual credit course or progress towards an Industry Recognized Certification)</p>

PERSONALIZED PATHWAYS	MHS COURSES AVAILABLE		
<p><b>ARTS &amp; COMMUNICATION</b></p> <p>Career Clusters</p> <ul style="list-style-type: none"> <li>Arts, Audio/Video Technology and Communications</li> </ul>	<p>Advanced Art Ceramics Chamber Choir Concert Choir Digital Photography Video Production Adv Digi/Video Prod</p>	<p>Floral Design Adv Floral Design Fundamentals of Art Intro to Accounting Jazz Ensemble Leadership Pottery</p>	<p>Spanish 1 Spanish 2 Symphonic Band Music Appreciation Welding – Advanced* Yearbook</p>
<p><b>BUSINESS &amp; MARKETING</b></p> <p>Career Clusters</p> <ul style="list-style-type: none"> <li>Business, Management and Administration</li> <li>Finance</li> <li>Marketing, Sales and Service</li> <li>Transportation, Distribution, and Logistics</li> </ul>	<p>Accounting 1 AG CA AP Calculus AP Statistics Computer Applications* Video Production</p>	<p>Leadership Microsoft IT Academy* Personal Finance* Pre-Calculus Digital Photography Adv Digi/Video Prod</p>	<p>SNAP PYTHON Spanish 1 Spanish 2 Yearbook</p>
<p><b>ENGINEERING &amp; TECHNOLOGY &amp; INDUSTRY</b></p> <p>Career Clusters</p> <ul style="list-style-type: none"> <li>Architecture and Construction</li> <li>Information Technology</li> <li>Manufacturing</li> <li>Science, Technology, Engineering and Mathematics</li> </ul>	<p>AG CAD AG Mechanics AG Robotics AG Woods 1 AG Woods 2 AP Biology* AP Calculus* Biotechnology</p>	<p>AP Statistics Chemistry Honors Chemistry* Intro to Agriculture Intro to Manufacturing Leadership Physics Ag Power and Tech</p>	<p>Python Pre-Calculus* SNAP Spanish 1 Spanish 2 Welding – Beginning Welding – Intermediate* Welding – Advanced*</p>
<p><b>HEALTH, EDUCATION &amp; HUMAN SERVICES</b></p> <p>Career Clusters</p> <ul style="list-style-type: none"> <li>Education and Training</li> <li>Government and Public Administration</li> <li>Hospitality and Tourism</li> <li>Human Services</li> <li>Law, Public Safety, Corrections and Security</li> </ul>	<p>Accounting AP Biology* AP Calculus* AP Statistics* Ag Power and Tech</p>	<p>Baking &amp; Pastry Chemistry Honors Chemistry* Food Science Foods Culinary Arts*</p>	<p>Leadership Physics Pre-Calculus* Spanish 1 Spanish 2</p>
<p><b>SCIENCE &amp; NATURAL RESOURCES</b></p> <p>Career Clusters</p> <ul style="list-style-type: none"> <li>Agriculture, Food and Natural Resources</li> <li>Health Science</li> <li>Science, Technology, Engineering and Mathematics</li> </ul>	<p>Accounting AG CAD AG Mechanics AG Woods1 AG Woods2 AP Biology* AP Calculus*</p>	<p>AP Statistics* Plant Science Floral Design Adv Floral Design Intro to Agriculture Intro to Manufacturing Leadership Biotechnology</p>	<p>Personal Finance* Physics Pre-Calculus* Welding – Beginning Welding – Intermediate* Welding – Advanced* Ag Power and Tech</p>

\*DUAL CREDIT OPPORTUNITY AVAILABLE

# Possible Courses

Record the classes you have currently taken, or are currently taken for easy reference. If you are unsure of which credit the course qualified for, put a ? to follow up.

## FRESHMAN

### 1<sup>ST</sup> SEMESTER

1. ENGLISH 9 \_\_\_\_\_
2. CWP \_\_\_\_\_
3. MATH \_\_\_\_\_
4. BIOLOGY \_\_\_\_\_
5. PE or COURSE^ \_\_\_\_\_
6. COURSE^ \_\_\_\_\_

### 2<sup>ND</sup> SEMESTER

1. ENGLISH 9 \_\_\_\_\_
2. CWP \_\_\_\_\_
3. MATH \_\_\_\_\_
4. BIOLOGY \_\_\_\_\_
5. COURSE \_\_\_\_\_
6. COURSE^ \_\_\_\_\_

## SOPHOMORE

### 1<sup>ST</sup> SEMESTER

1. ENGLISH 10 \_\_\_\_\_
2. CIVICS \_\_\_\_\_
3. SCIENCE \_\_\_\_\_
4. MATH \_\_\_\_\_
5. YR 1 WORLD LANG OR PRR\* \_\_\_\_\_
6. COURSE^ \_\_\_\_\_

### 2<sup>ND</sup> SEMESTER

1. ENGLISH 10 \_\_\_\_\_
2. HEALTH \_\_\_\_\_
3. SCIENCE \_\_\_\_\_
4. MATH \_\_\_\_\_
5. YR 1 WORLD LANG or PRR\* \_\_\_\_\_
6. COURSE^ \_\_\_\_\_

### 1<sup>ST</sup> SEMESTER

1. ENGLISH 11 \_\_\_\_\_
2. U.S. HISTORY \_\_\_\_\_
3. MATH \_\_\_\_\_
4. SCIENCE \_\_\_\_\_
5. YR 2 WORLD LANG or PRR\* \_\_\_\_\_
6. COURSE^ \_\_\_\_\_

## JUNIOR

### 2<sup>ND</sup> SEMESTER

1. ENGLISH 11 \_\_\_\_\_
2. U.S. HISTORY \_\_\_\_\_
3. MATH \_\_\_\_\_
4. SCIENCE \_\_\_\_\_
5. YR 2 WORLD LANG or PRR\* \_\_\_\_\_
6. COURSE^ \_\_\_\_\_

## SENIOR

### 1<sup>ST</sup> SEMESTER

1. ENGLISH 12 \_\_\_\_\_
2. SEN. SOCIAL STUDIES \_\_\_\_\_
3. COURSE^ \_\_\_\_\_
4. COURSE^ \_\_\_\_\_
5. COURSE^ \_\_\_\_\_
6. COURSE^ \_\_\_\_\_

### 2<sup>ND</sup> SEMESTER

1. ENGLISH 12 \_\_\_\_\_
2. COURSE^ \_\_\_\_\_
3. COURSE^ \_\_\_\_\_
4. COURSE^ \_\_\_\_\_
5. COURSE^ \_\_\_\_\_
6. COURSE^ \_\_\_\_\_

^ - Choose a course that either meets a graduation requirement or your high school and beyond plan.

\*-PRR = Personalized Pathway Requirement. If not taking two years of a world language, students need to take courses that lead to a specific post-high school career outcome based on the student's interest and High School and Beyond Plan.

**EVERYONE MUST TAKE A QUANTITATIVE MATH CLASS OR AN ALGEBRA BASED SCIENCE DURING SENIOR YEAR IF YOU HAVE NOT YET PASSED OR ARE CURRENTLY TAKING PRE-CALCULUS**