

### Electronic file located in Xello - "Course Planner" Located at Olathe North Instagram: @on\_medpro

Apply at: olatheschools.org/careerpathways



# Four-Year Academy

<b>Graduation Requirements</b>	9th Grade	Credits	10th Grade	Credits	11th Grade	Credits	12th Grade	Credits	Y 13
English (x4 credits)	English 9 <i>OR</i> Honors English 9	1	English 10 <i>OR</i> Honors English 10	1	English 11 <i>OR</i> AP English Language	1	English 12 <i>OR</i> College Prep English <i>OR</i> AP English Literature	1	
Math (x3 credits)	Must take 1.0 math 9th gr year as recommended by facilitator & math teacher	1	Must take 1.0 math 10th gr year as recommended by facilitator & math teacher	1	Must take 1.0 math 11th gr year as recommended by facilitator & math teacher	1	Must take 1.0 math 12th gr year as recommended by facilitator & math teacher	1	
Science (x3 credits) (1 Life; 1 Physical; 1 Elective) (College bound student should enroll in at least one credit each of Biology, Chemistry, and Physics)	Required: Honors Biology	1	Required: Honors Chemistry OR General Chemistry  Recommended: Anatomy and Physiology OR AP Physics I	1	Required: AP Chemistry OR College Chemistry  Recommended: Anatomy and Physiology OR AP Physics I	1	Required: AP Biology <i>OR</i> College Biology Recommended: AP Physics I <i>OR</i> AP Physics II <i>OR</i> Anatomy and Physiology	1+	
Social Studies (x3 credits) (1 World; 1 US; 0.5 Govt; 0.5 elective)	World History <i>OR</i> Honors World History	1	Optional: AP European History OR AP Psychology OR .5 elective social science	.5	US History <i>OR</i> AP US History	1	US Govt <i>OR</i> AP US Govt	.5	
Communications (0.5 credit)	All Academy Capstone Courses will fulfill the Communications Requirement								Y 14
Financial Literacy: (0.5 credit)	Financial Literacy								
Fine/Performing Arts (1 credit)	Student choice - any year(s) 1+								
Health: (0.5 credit)	Health Education Optional: Health may be taken online through eAcademy if space is needed in student's schedule.								
Language Applications: (1.0 credit)	Student choice - any year(s) 1+ College-bound students should enroll in 2 years of the same World Language.								
Life Studies: (0.5 credit)	Academy coursework fulfills this requirement								
Physical Education (0.5 credit)	PE Concepts OR Cheer/Dance Team OR Strength & Conditioning 1.5 Optional: P.E. Concepts may be taken online through eAcademy if space is needed in student's schedule. This can be scheduled during the summer - grades 10-12 only. Other online classes are available at eacademy.olatheschools.com								
STEM (1.0 credit)	Students fulfill STEM graduation requirement through Four-Year Academy Courses								
Individual Focus (5.5 credits) Four-Year Academy Coursework	Medical Professions Investigations	1	Genetic Applications	1	Advanced Biotechnology	2	Medical Professions Senior Capstone	.5- 2.0	
Total Credits: (24 total needed for graduation)	9th grade total:	7	10th grade total:	7	11th grade total:	7	12th grade total:	3+	
	NOTE: C	redit	s beyond requirements in any category w	ill fal	l under individual focus.				
					ssful completion of coursework, outside-the y facilitator or found on the web at <u>olathes</u>				



Four-Year Academy



## Genetics, Research, & Human Healthcare

#### WHO WE ARE:

We fuse technology, research and hands-on patient care to discover a variety of opportunities available through the life sciences field. Through specialized experiences and innovative labs, students are exposed to the following three major topics:

- Genetics Take an in-depth look into our genetic code through DNA, and the various building blocks and proteins it codes for.
- **Research** Students have opportunities to conduct research using specialized equipment in the life science and biotechnology fields.
- **Human Healthcare** The overall focus of this Academy is to combine genetics and research, while applying them to patient care. Senior year, students may obtain internships in the healthcare industry and put their background knowledge to the test in a patient care environment.

### WHAT WE DO:

- Use industry-standard research lab equipment.
- Offer partnerships with educational and industry leaders for shadowing and internships in hospitals, research labs, and patient care settings across life science fields.
- Study and manipulate DNA and proteins.

- Participate in tours and experiences at local life science related institutions including medical, nursing, pharmacy and dental schools.
- Participate in the SMART Team (Students Modeling A Research Topic) to design a scientific poster and 3D protein model with MSOE and research scientists, with the chance to present at the National Experimental Biology Conference.

Olathe North High School | 913.780.7140 | Explore careers in this field with the Occupational Outlook Handbook at https://www.bls.gov/ooh/