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High School Leadership
Mr. Chad Scaling ........................................Principal
Mr. Mitch Rosekrans .......................... Asst. Principal
Ms. Karen Doree ......................... Asst. Principal
Dear South Lyon High School Students:

It is with tremendous excitement that I welcome you to South Lyon High School, a school strong in academic and co-curricular programming! We offer you many opportunities to personalize your education to prepare you for your future. The state of Michigan has created one of the most robust graduation requirement frameworks in the nation. South Lyon Community Schools’ personnel have worked extensively to provide you with every opportunity to succeed within a state mandated curriculum of significant rigor. The decisions you make now will be critical as you prepare for the future you desire. I can assure you that our staff will help you make these choices and do our absolute best to put you in positions for success. We are committed to innovative programming to foster a teaching and learning community where instruction is student-centered and connected to real world experiences.

As you matriculate through South Lyon, please keep in mind that high school is about much more than earning a diploma. This is the time to learn about your maturing talents, to explore careers, and to discover who you are and what you want to become. Selecting a challenging course of study is important to ensure that colleges and future employers are made aware of your strong work ethic, desire to learn, and ambition to be the best you can be. We are here to help you flourish throughout your high school career.

Our goal is to provide all South Lyon students with the opportunity to excel in academics, athletics, fine arts and co-curricular programs so that you may become positive contributing members of our school and community.

The challenges that we face in this ever-changing world can best be addressed with a strong educational experience. I look forward to working with each of you and I am eager to meet these challenges with you.

Sincerely,

Chad E. Scaling, Principal
South Lyon High School

South Lyon Community Schools

Dr. William Pearson, Superintendent
South Lyon High School

South Lyon High School is home to more than 1200 students in grades 9 through 12. Originally built in 1990, the building has undergone several expansions and renovations. It covers 325,000 square feet and is designed to serve the entire community. The building features bright classrooms, a library/media center, two gymnasiums, fitness center, dance studio, swimming pool, television studio, lecture hall, and a professional quality auditorium. The Commons is the central focal point of the first floor.

Our Faculty

SLHS boasts more than 70 certified teachers and counselors. All seek out additional training to stay current in their fields. Always willing to give our students the extra assistance they need, our teachers are dedicated to student success, and, to help students learn, they employ a variety of methods, such as cooperative learning, hands-on experience, problem-solving, Habits of Mind, and other effective teaching strategies. A variety of assessment methods allow students to demonstrate what they have learned.

Our Curriculum

Aligned with the Department of Education’s Michigan Merit Curriculum, our program is designed to prepare students to meet college and career entrance requirements and to provide all students with a chance to pursue their interests.

We offer two Honors English courses and 11 Advanced Placement courses. Additionally, more than 100 students spend 1/2 of each day at the Oakland Schools’ Technical Center Southwest in nearby Walled Lake in 7 different career pathway clusters.

Accreditation

Our programs and services are accredited by the North Central Association of Secondary Schools (now AdvancED) - a distinction we have maintained since 1972 with an ongoing process of self-improvement and evaluation.

Assessment

SLHS students consistently meet or exceed national averages on the SAT and ACT and they compare favorably to their peers in neighboring districts on the Michigan Merit Examination (MME).

Calendar and Credits

SLHS is structured on a traditional 6-period day within two semesters per 175 day school year that runs from Labor Day through mid-June. Students earn 1/2 credit per course per semester with 24 credits possible over four years.

Mission Statement

South Lyon High School will motivate, educate and support students by providing a variety of learning opportunities designed to prepare them for lifelong challenges.
Credits and Class Placement

SLCS Board Policy 7630

HIGH SCHOOL CREDIT

Students have the opportunity to earn 1/2 credit per course, per semester, for a total of 3 credits each semester and 6 credits each year. Up to 24 credits may be earned in 4 years. The number of credits that you earn determines whether or not you graduate on time.

CLASS PLACEMENT

Class designation is based on the number of years that a student has been in high school.

<table>
<thead>
<tr>
<th>Year 1:</th>
<th>Year 2:</th>
<th>Year 3:</th>
<th>Year 4:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>Sophomore</td>
<td>Junior</td>
<td>Senior *</td>
</tr>
</tbody>
</table>

In order to assure that you are on schedule to graduate in 4 years with the required 23 credits, it is important that you monitor your progress each year so that you meet your goal. The following are the recommended credit “checkpoints” to ensure that you will graduate on time:

<table>
<thead>
<tr>
<th>By the end of:</th>
<th>You should have earned at least:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th grade</td>
<td>5.5 credits</td>
</tr>
<tr>
<td>10th grade</td>
<td>11.0 credits</td>
</tr>
<tr>
<td>11th grade</td>
<td>17.0 credits</td>
</tr>
<tr>
<td>12th grade</td>
<td>23.0 credits</td>
</tr>
</tbody>
</table>

* A senior who has not fulfilled all graduation requirements by the end of year 4 will remain classified as a senior.

TRANSFER CREDITS

Academic credits earned by students in an accredited high school will be reconfigured to equate to the credit system used by South Lyon Community Schools, with the maximum credits of 3 credits per semester counted toward SLCS’s graduation requirements. With the following exceptions, credits earned in a regionally accredited school will be entered into the student’s South Lyon permanent academic record (transcript) with designations assigned by the sending school. Exceptions include:

- Credit earned from religion courses will be recorded as elective credit.
- Credit earned from driver education or correspondence courses will not be transferred onto the student’s South Lyon academic record.

Transfer of credit earned in unaccredited schools or home schools is governed by SLCS’s Board Policy 5460 at www.slcus.us.
Credit Recovery & Supplemental Credits

To reposition themselves to graduate with their class, students whose earned credits do not meet these benchmarks will need extra coursework. Other students may want to take advantage of challenges offered by nearby colleges or online courses to supplement their education.

Board Policy 5460 allows students to take one or two additional on site courses during each semester of the school year and during the summer. Costs and transportation are the responsibility of the students and their families. Opportunities include:

Summer School

Several neighboring districts offer students the opportunity to retake required core academic courses. Information is usually available in Student Services in May. Guidance counselors are available to explore these options.

College Courses (other than Dual Enrollment)

Students who want the collegiate experience may take up to two courses per term at area community or four-year colleges. You must secure your principal’s permission, submit an application and meet the school’s requirements for admission. Your counselor will add 1/2 credit to your permanent high school record for each course that you complete at the college level. Grades earned in college courses will not impact your GPA. See your counselor for more information. (Note: This option does not include campus-based summer programs designed for high school students.)

Online Courses

All high school students are eligible to enroll in two online courses for up to one credit each semester with the principal’s prior approval. No more than two online courses may be taken during the summer. Numerous criteria must be met (see SLCS Board Policy 5460 at www.slcs.us.).

Early Graduation

Students may graduate early as long as they have met all graduation requirements and a minimum of 23 credits.

Credit Recovery Grading Policy

For courses repeated at SLCS the highest course grade will be reflected on the transcript and factored in the GPA. Grades for courses taken during summer school will appear on the transcript in addition to the original grade; both are factored in the GPA. Courses taken online will receive a “G” grade and will not impact the GPA or athletic eligibility; the original grade will remain on the transcript.
## SOUTH LYON COMMUNITY SCHOOLS’
### HIGH SCHOOL GRADUATION REQUIREMENTS

<table>
<thead>
<tr>
<th>Total Credits Required</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>English</strong></td>
<td>4 high school credits (1 credit each year), including</td>
</tr>
<tr>
<td></td>
<td>1 cr. English 9</td>
</tr>
<tr>
<td></td>
<td>1 cr. English 10</td>
</tr>
<tr>
<td></td>
<td>1 cr. 11th Grade Literature course</td>
</tr>
<tr>
<td></td>
<td>1 cr. 12th Grade English elective</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td>4 high school credits, including</td>
</tr>
<tr>
<td></td>
<td>1 cr. Algebra 1 (Grade 7, 8)</td>
</tr>
<tr>
<td></td>
<td>1 cr. Geometry (Grade 8, 9, or 10)</td>
</tr>
<tr>
<td></td>
<td>1 cr. Algebra 2 (or designated alternate courses according to eligibility guidelines)</td>
</tr>
<tr>
<td></td>
<td><em>STUDENTS MUST EARN 1 CREDIT IN A MATH OR MATH-RELATED COURSE IN 12TH GRADE.</em></td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>3 high school credits, including</td>
</tr>
<tr>
<td></td>
<td>1 cr. Biology (Grade 9)</td>
</tr>
<tr>
<td></td>
<td>1 cr. Chemistry or Analytical Chemistry</td>
</tr>
<tr>
<td></td>
<td>1 cr. Geophysical Science or Physics</td>
</tr>
<tr>
<td></td>
<td><em>Students may choose 2 Science courses in 10th and 11th Grades.</em></td>
</tr>
<tr>
<td><strong>Physical Education and Health</strong></td>
<td>1 high school credit</td>
</tr>
<tr>
<td></td>
<td>0.5 cr. Foundations of Health and Physical Education</td>
</tr>
<tr>
<td></td>
<td>0.5 cr. Healthy Life Habits</td>
</tr>
<tr>
<td><strong>Social Studies</strong></td>
<td>3 high school credits, including</td>
</tr>
<tr>
<td></td>
<td>1 cr. 20th Century American History (Grade 9)</td>
</tr>
<tr>
<td></td>
<td>1 cr. World Studies (Grade 10)</td>
</tr>
<tr>
<td></td>
<td>0.5 cr. Economics (Grade 11)</td>
</tr>
<tr>
<td></td>
<td>0.5 cr. Government (Grade 11)</td>
</tr>
<tr>
<td><strong>World Language</strong></td>
<td>2 high school credits are required in the same world language.</td>
</tr>
<tr>
<td>Class of 2016 and beyond</td>
<td>High School credit will be granted for successful completion of a World Language in 8th grade.</td>
</tr>
<tr>
<td><strong>Applied, Visual &amp; Performing Arts</strong></td>
<td>1 high school credit</td>
</tr>
<tr>
<td></td>
<td>Visual &amp; Performing Arts include Art, Music, Drama, etc. Applied Arts include courses with a creative design component, such as technology design, yearbook, etc.</td>
</tr>
<tr>
<td><strong>State Examination</strong></td>
<td>All students must take the Michigan Merit Exam in their Junior Year as a graduation requirement.</td>
</tr>
<tr>
<td><strong>Online Experience</strong></td>
<td>All students will complete online learning in core area subjects.</td>
</tr>
<tr>
<td>Grades 7-12</td>
<td></td>
</tr>
<tr>
<td><strong>Elective Credits</strong></td>
<td>8.0</td>
</tr>
</tbody>
</table>

Note: Transfer credits will be calculated in accordance with South Lyon Community Schools’ Board of Education Policy 7630
TESTING

MICHIGAN MERIT EXAM (MME)
MME tests include the ACT + Writing, Work Keys and Michigan Merit Tests. It is administered to all juniors in March.

PLAN
This test is a practice version of the ACT and will be administered to all sophomores in the fall. PLAN results help students plan their remaining years of high school and can provide valuable career awareness information.

PSAT (Preliminary Scholastic Aptitude Test)
This test is made available to all 11th grade students, and is given on the third Saturday of October (10 graders may also take this test). Students pay a fee for this test which is a prerequisite for the National Merit Scholarship Competition.

ACT + WRITING
This test is given on Saturday mornings throughout the school year at various test sites in the surrounding areas. The ACT + Writing is for students who wish to retake just this portion of the MME. Students may opt to take only the ACT (not including the writing portion). All juniors will take the ACT+ Writing as a component of the Michigan Merit Exam in March.

SAT (Scholastic Aptitude Test)
This test is given on Saturday mornings throughout the school year at various test sites in the surrounding areas. Although it is not required by most Michigan Colleges and Universities, it may be requested by out-of-state institutions. Juniors and seniors have specific recommended dates. Students should check with their guidance counselor for recommendation.

ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB)
The ASVAB is designed to identify your unique vocational talents or abilities. Originally used to assist the armed services in placing new recruits in vocational/technical training programs, the test has a broad application outside the military, as well. Come to the Student Services Center for more information.

ADVANCED PLACEMENT PROGRAM
Advanced Placement (AP) courses are offered in the English, Mathematics, Science and Social Studies Departments. These classes are equal to entry level college courses in the degrees of concentration, advanced work and study that are required. Students who successfully complete AP course requirements may choose to take the College Entrance Examination Board’s AP tests in May. Acceptable scores on an AP test may enable the student to receive college credit for the course or to bypass entry level college courses.

GRADING
Each student’s report card will indicate a grade point average for that six-week period. South Lyon High School uses the 4-point grading system for all purposes. A cumulative grade point average for each student is computed at the end of each semester. The GPA is determined by averaging the grades, using the following values:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
</tr>
<tr>
<td>E</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Those students who receive a grade of incomplete must contact their teacher to remove the incomplete. At the end of each semester, students will also be given grades based on the Habits of Mind. The HOM we will be assessing are:

1. WI = Works Independently
2. TW = Teamwork
3. WH = Work Habits
4. INT = Initiative
It is now possible to fulfill some graduation requirements with courses from multiple departments. Two points you must keep in mind as you plan your four years of high school:

- **You may not “double dip.”** Course credit may be used to satisfy only ONE requirement. For example, Physics may be counted toward EITHER the science requirement or the senior year math or math related course. It’s either science or math-related, but not both.
- **Be sure that you have planned your program to include prerequisites** for the courses that you plan to take. For example, you must take the year-long Technical Drawing & CAD course to qualify for the Advanced Technical Drawing & CAD course. Either course counts as your Applied Visual & Performing Arts credit.

### All students must earn 1.0 English credit in their senior year. Choose from the following courses:

**Year-Long Courses (1.0 credit)**

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP English</td>
</tr>
<tr>
<td>British Literature</td>
</tr>
<tr>
<td>Journalism</td>
</tr>
<tr>
<td>Classical Literature &amp; Thought</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Literature</td>
</tr>
<tr>
<td>English20th Century Perspectives</td>
</tr>
<tr>
<td>Reading &amp; Writing for the College Bound</td>
</tr>
<tr>
<td>OSTC-English 12 (See your Guidance Counselor)</td>
</tr>
</tbody>
</table>

### All students must earn a mathematics or mathematics-related credit during their senior year. If you decide not to take a specific math course, you must choose from the following courses:

<table>
<thead>
<tr>
<th>Business &amp; Computers</th>
<th>Design &amp; Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>Visual Basis 1</td>
</tr>
<tr>
<td></td>
<td>Electronics &amp; Control</td>
</tr>
<tr>
<td></td>
<td>Robotics &amp; Automation</td>
</tr>
<tr>
<td></td>
<td>Engineering Projects</td>
</tr>
<tr>
<td>Science</td>
<td>Advanced Technical Drawing &amp; CAD</td>
</tr>
<tr>
<td>Physics</td>
<td></td>
</tr>
<tr>
<td>AP Physics</td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td>OSTC – Math related courses in all clusters will meet 12th grade</td>
</tr>
<tr>
<td>AP Microeconomics</td>
<td>Math requirement (See your Guidance Counselor).</td>
</tr>
<tr>
<td>AP Macroeconomics</td>
<td></td>
</tr>
</tbody>
</table>

### All students must earn 1.0 credit in the Applied, Visual and Performing Arts. You may choose from the following courses:

<table>
<thead>
<tr>
<th>Art Dept</th>
<th>Applied Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamentals of Art 1</td>
<td>TV Production 1</td>
</tr>
<tr>
<td>Fundamentals of Art 2</td>
<td>TV Production 2</td>
</tr>
<tr>
<td>Ceramics</td>
<td>Yearbook</td>
</tr>
<tr>
<td>Adv. Ceramics</td>
<td></td>
</tr>
<tr>
<td>Drawing &amp; Painting / Advanced</td>
<td></td>
</tr>
<tr>
<td>Jewelry Design and Metalsmithing / Adv. Photography</td>
<td></td>
</tr>
<tr>
<td>Adv. Photography</td>
<td></td>
</tr>
<tr>
<td>Sculpture</td>
<td></td>
</tr>
<tr>
<td>Adv. Sculpture</td>
<td></td>
</tr>
<tr>
<td>Business &amp; Computers Dept.</td>
<td>Music Department</td>
</tr>
<tr>
<td>Desktop Publishing</td>
<td>All music courses</td>
</tr>
<tr>
<td>Digital Imaging</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship / Science</td>
<td></td>
</tr>
<tr>
<td>MS User 1 &amp; 2</td>
<td></td>
</tr>
<tr>
<td>Introduction to Business</td>
<td></td>
</tr>
<tr>
<td>Design &amp; Technology</td>
<td></td>
</tr>
<tr>
<td>Modern Technologies</td>
<td></td>
</tr>
<tr>
<td>Electronics &amp; Control</td>
<td></td>
</tr>
<tr>
<td>Robotics &amp; Automation</td>
<td></td>
</tr>
<tr>
<td>Engineering Projects</td>
<td></td>
</tr>
<tr>
<td>Technical Drawing &amp; CAD</td>
<td></td>
</tr>
<tr>
<td>Advanced Technical Drawing &amp; CAD</td>
<td></td>
</tr>
<tr>
<td>Visual Basic 1</td>
<td></td>
</tr>
<tr>
<td>Oakland Schools Technical Campus</td>
<td></td>
</tr>
<tr>
<td>Visual Imaging Technology</td>
<td></td>
</tr>
<tr>
<td>Engineering/Emerging Technologies</td>
<td></td>
</tr>
<tr>
<td>Culinary Arts/Hospitality</td>
<td></td>
</tr>
<tr>
<td>Transportation Technology</td>
<td></td>
</tr>
<tr>
<td>Business, Management, Marketing &amp; Tech.</td>
<td></td>
</tr>
<tr>
<td>Health Sciences</td>
<td></td>
</tr>
<tr>
<td>Biotechnology and Environmental Science</td>
<td></td>
</tr>
</tbody>
</table>
DUAL ENROLLMENT
Grades 11, 12
1 semester
Prerequisite: Qualifying Scores (PSAT, PLAN, ACT, or MME) AND approval of Principal
High school juniors and seniors in Michigan have the opportunity to enroll in college courses at the school district’s expense. (Certain restrictions apply.) Students may earn both high school and college credit for courses completed under Dual Enrollment. See your guidance counselor for more information.

INDEPENDENT STUDY
Grade 12
1 semester
Prerequisite: Students and Teacher must complete an application form that is available in the Student Services Office and submit it for Administrative approval.
Independent Study is for seniors who wish to pursue a subject that is not included in the high school curriculum. The student and teacher jointly design a course-for-one that includes goals, objectives, major projects, due dates, etc. NOTE: Independent Study—English will not count toward fulfillment of the English requirement for graduation.

TESTING OUT
Public Act 335, Section 21B, of the state code, requires that any high school student be offered the opportunity to “test out” of any course offered by his/her high school. In order to test out, students must exhibit mastery of the course content by attaining a passing grade of 78% or better on a comprehensive final assessment. In addition, along with the exam, students may also be required to demonstrate mastery through basic assessments used in the class, which may include but not be limited to, a portfolio, research papers, projects and/or oral presentations.

If the student attains at least a 78% on the testing out assessment, s/he will receive credit in the course toward graduation, as well as allow the student to satisfy core content requirements. For example, testing out of Algebra I would allow a student to move on to Geometry. Once the testing out exam is passed, a student may not receive credit for a lower course in that course sequence. While the student will receive credit for testing out of a course with a 78% or higher, a G (credit) will be entered on the student’s transcript, but a grade will not be included in the computation of the grade point average. If a student had already taken the entire course prior to testing out, but did not pass the course, the failing grade will remain on the student’s transcript and averaged into the grade point average. This is for core classes (required for graduation) only.
For non-core classes, students may “place out” meaning students may take the test to place them in a more advanced course. Credit is not given for students placing out of course sequence.

Testing Out is offered in January and June of each school year. Students should discuss the possibilities with their counselor.
PREPARATION FOR SUCCESS AT THE COLLEGE LEVEL

90% of students who enter high school say they want to go on to some type of college after they receive their diplomas. Yet, in four years, only half of them will make that dream come true. Of those 45%, some will finish and some will not. Why do some make it and some don’t? What about you? How can you be sure you’re one of the successful ones?

It’s not grades, and it’s not test scores. The biggest factor in who makes it to college and who succeeds are the courses you choose in high school. The more challenging courses you take, the better prepared for anything you will be. Students are better off taking challenging courses and earning C’s, rather than taking easier courses and earning A’s.

The Presidents’ Council of the State Universities of Michigan and the National Collegiate Athletic Association have established standards for secondary preparation that will provide you with the background and skills you will need to meet the rigor of college courses.

<table>
<thead>
<tr>
<th>President’s Council of the State Universities of Michigan* (<a href="http://www.pcsun.org">www.pcsun.org</a>)</th>
<th>NCAA Division I Freshman Eligibility Standards** (<a href="http://www.ncaaclearinghouse.org">www.ncaaclearinghouse.org</a>)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 years</td>
<td>4 years</td>
</tr>
<tr>
<td>Mathematics</td>
<td>4 years</td>
<td>3 years</td>
</tr>
<tr>
<td>Science</td>
<td>4 years, including Biology, Physics and Chemistry</td>
<td>2 years natural/physical Science</td>
</tr>
<tr>
<td>Social Studies</td>
<td>4 years</td>
<td>2 years</td>
</tr>
<tr>
<td>World Language</td>
<td>3 years</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>Students are encouraged to take additional courses in: - Fine and Performing Arts - Information Technology</td>
<td>1 year of additional English, Math or natural /physical Science. 4 years of additional courses from any area above or from World Language or comparative Religion /Philosophy courses NCAA Amateurism Certification Questionnaire ACT or SAT scores</td>
</tr>
<tr>
<td>Total</td>
<td>19 Credits</td>
<td>16 Credits</td>
</tr>
</tbody>
</table>

* Some Michigan universities require a specific number of high school credits in certain academic disciplines. Furthermore, a student whose background does not measure up to these recommendations will be expected to take (and pay for) remedial classes that may not count toward a degree program. For more information, go to the college’s website or contact the admissions office.

** Students who intend to participate in athletics at Division I or II schools must meet these requirements for freshman eligibility. Students should register with NCAA after completion of the junior year. To register, go to www.ncaaclearinghouse.org.
If a student is uncertain of course choices (including Honors and AP courses) they should discuss their options with their current teachers.

Please Note: Although every possible effort is made to give students their first or second choice in electives, students will not be *guaranteed* their elective choices.
# South Lyon High Schools
## Four Year Planning Worksheet

**Name:**

**Career Pathway:**

**Post Secondary Education Goal:**
- [ ] College/University
- [ ] Community College/Technical School
- [ ] Undecided

<table>
<thead>
<tr>
<th>Grade 9</th>
<th>CR</th>
<th>Grade 10</th>
<th>CR</th>
<th>Grade 11</th>
<th>CR</th>
<th>Grade 12</th>
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<td>English 10</td>
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<td>Government</td>
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<td>Economics</td>
<td>0.5</td>
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<td>Math</td>
<td></td>
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</table>

**9th Total Credits:**

**10th Total Credits:**

**11th Total Credits:**

**12th Total Credits:**

**Required Semesters:**
- [ ] English 9
- [ ] English 10
- [ ] Literature (11th)
- [ ] English Electives (12th)
- [ ] Biology
- [ ] Geophysical Science or Physics
- [ ] Chemistry
- [ ] Healthy Life Habits
- [ ] Foundation of Health & Phys. Ed.
- [ ] 20th Century American History
- [ ] World Studies
- [ ] Economics
- [ ] Government
- [ ] Applied, Visual, & Performing Arts
- [ ] Algebra 1 (Grade 9 or Grade 10)
- [ ] Geometry (Grade 8, 9, or 11)
- [ ] Algebra 2 (or Equivalent)
- [ ] 12th Grade Math (1 credit)
- [ ] Michigan Merit Exam
- [ ] Class of 2016 and Beyond
- [ ] World Language (2 Credits of the same language)
TELEVISION PRODUCTION 1
Grades 10, 11, 12
1 Semester
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Students will learn to storyboard, shoot and edit video using non-linear digital software. The students will also be introduced to the positions and responsibilities involved in television production. Students should expect to spend time out of class to meet production deadlines. This is the entry level course for anyone interested in joining the video production crew at WSLH.

TELEVISION PRODUCTION 2
Grades 10, 11, 12
1 Semester
Prerequisite: Expertise on the equipment in Television Production 1 and excellent attendance.
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Students are responsible for the LIVE production of the daily announcements for the school. The students fill all positions used in television production on a rotating schedule. The students are also responsible for producing various feature videos for the school throughout the year. Students must be able to work together cooperatively and under pressure. Students are expected to spend time before and/or after school to meet production deadlines.

YEARBOOK
Grades 11, 12
2 semesters
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Yearbook staff members will develop or expand their expertise in writing, art, design, leadership, and time management, accepting and meeting responsibility, salesmanship, business management, advertising, photography, graphics, computer operation, and other skills. In few other classes do students have the opportunity to see those skills adapted as effectively into one project. They must function in a highly realistic, job-oriented situation which affords them an excellent chance for career-planning and consideration. With a final product that will be read by many, students are often motivated to master these skills more thoroughly than ever before.
*May be repeated for elective credit.
ART

CERAMICS
Grades 9, 10, 11, 12
1 Semester
Prerequisite: None
Will count toward the Visual, Applied and Performing Arts graduation requirement.
This class focuses on traditional and alternative methods for constructing clay vessels, with an emphasis on developing craftsmanship. Students will be introduced to hand-building, the potter's wheel and glazing techniques.

ADVANCED CERAMICS
Grades 9, 10, 11, 12
1 Semester
Prerequisite: Ceramics
Will count toward the Visual, Applied and Performing Arts graduation requirement.
The focus of Advanced Ceramics is on the development of content and style in student artwork. Advanced students will work within the context of the regular classroom setting, while concentrating on amassing a substantial body of work. They will work contractually with the instructor regarding individual focus. In addition, these students will research movements in art history and individual artists in order to develop a sense of direction in their work.

DRAWING & PAINTING
Grades 10, 11, 12
1 Semester
Prerequisite: None
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Students will explore the foundations of drawing and painting in a two-dimensional studio setting. The course will emphasize the elements and principles of design as they apply to various media. The focus will be to use drawing and painting media to strengthen visual communication skills.

ADVANCED DRAWING & PAINTING
Grades 10, 11, 12
1 Semester
Prerequisite: Drawing & Painting
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Advanced Drawing & Painting students will work within the context of the regular classroom setting, focusing on the development of content and style in their artwork. They will work contractually with the instructor regarding individual focus and concentrate on collecting and creating a substantial body of work. In addition, these students will research movement in art history and individual artists in order to develop a sense of direction in their artwork.

JEWELRY DESIGN AND METALSMITHING TECHNIQUES
Grades 10, 11, 12
1 Semester
Prerequisite: None, Fundamentals of Art I strongly recommended
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Metalsmithing and Jewelry Design teaches concepts of three-dimensional design and creative problem solving. Students will learn basic metalsmithing techniques such as designing, sawing, piercing, soldering, casting, stone setting, and polishing. Each student will work contractually with the instructor on individual focus and receive personalized instruction and attention from the beginning of each jewelry project through its completion.
ADVANCED JEWELRY DESIGN AND METALSMITHING TECHNIQUES

Grades 10, 11, 12
1 Semester
Prerequisite: Jewelry Design and Metalsmithing Techniques
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Advanced Metalsmithing is a studio class for advanced students who will focus on the development of content and individual style in their artwork. Working contractually with the instructor, they will create and collect a substantial body of work. In addition, these students will research the work of contemporary metal artists in order to develop a sense of direction in their artwork.

PHOTOGRAPHY

Grades 10, 11, 12
1 Semester
Prerequisite: None
Will count toward the Visual, Applied and Performing Arts graduation requirement.
This course is an introduction photographic image making; including composition, traditional darkroom and digital techniques. This class is designed for the student who is interested in the entire photographic process, from taking the picture to the finished print. The philosophy of this course is based on photographic fundamentals, fine art and commercial photography. Cameras are not required, but recommended. A flash drive is very useful for the coursework.

ADVANCED PHOTOGRAPHY

Grades 10, 11, 12
1 Semester
Prerequisite: Photography
Will count toward the Visual, Applied and Performing Arts graduation requirement.
The focus of Advanced Photography is on the development of content and style in student artwork. Advanced students will work contractually with the instructor regarding individual focus within the context of the regular classroom setting. They will focus on the development of a substantial body of work. In addition, advanced students will research movements in art history and individual artists in order to develop a sense of direction in their artwork.

SCULPTURE

Grades 10, 11, 12
1 Semester
Prerequisite: None
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Sculpture is a one-semester studio class incorporating principles of three-dimensional design. Students will work with clay, plaster, concrete, wood, stone and other materials. Realistic and abstract sculpture will be covered.

ADVANCED SCULPTURE

Grades 10, 11, 12
1 Semester
Prerequisite: Sculpture
Will count toward the Visual, Applied and Performing Arts graduation requirement.
The focus of Advanced Sculpture is on the development of content and style in student artwork. Advanced students will work contractually with the instructor regarding individual focus within the context of the regular classroom setting. They will focus on the development of a substantial body of work. In addition, advanced students will research movements in art history and individual artists in order to develop a sense of direction in their artwork.
FUNDAMENTALS OF ART 1 & FUNDAMENTALS OF ART 2

Grades 9, 10, 11, 12
1 Semester each
Prerequisite: Fundamentals of Art 1 – none. Fundamentals of Art 2 – Fundamentals of Art 1
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Each one- semester course affords students the opportunity to learn the language of design. Emphasis will be on the use of various media to effectively communicate the elements and principles of design. Both courses will provide foundation skills for students who plan to enroll in other studio art courses.
BUSINESS AND COMPUTERS

ACCOUNTING
Grades 11, 12
2 Semesters
This course may be counted as a 12th grade Mathematics experience.
Studies have shown that students who take accounting for the first time in college have only a 30% success rate. Understanding fundamental accounting systems is beneficial to both college-bound students and those who want to have marketable office skills upon graduation. Students will learn how to account for a variety of business types using both manual and computerized accounting systems. Students will also learn how to prepare, interpret and analyze financial statements. Instruction includes a variety of simulations, one of which is playing Monopoly—Accounting style. NOTE: This class is strongly recommended for students who plan to pursue any type of business career. Colleges require all business students to take two accounting courses.

DESKTOP PUBLISHING
Grades 10, 11, 12
1 Semester
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Desktop Publishing is increasingly prevalent in our high-tech society. In this class, students will learn the fundamentals of graphic design and will use Adobe InDesign to do a variety of projects. Students will create flyers, brochures, newspapers, posters, magazine covers, CD case inserts, games, books and more. Good keyboarding skills are strongly recommended.

DIGITAL IMAGING AND MULTI MEDIA COMPUTING
Grades 9, 10, 11, 12
1 Semester
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Students will gain hands-on experience and a solid understanding of sophisticated software and peripherals as they learn to produce a variety of computer images. They will also learn to integrate video, text, audio and graphics to deliver superior interactive presentations and web pages.

ENTREPRENEURSHIP
Grades 10, 11, 12
1 Semester
Will count toward the Visual, Applied and Performing Arts graduation requirement.
Entrepreneurs are the cornerstone of the American free enterprise system. As the American economy continues to shift toward an emphasis on service and technology, the entrepreneurial spirit is flourishing. Students will learn of the many options available to them and the preparation necessary to meet the challenge of those opportunities. The class studies will include: Potential of the Sole Proprietorship, Recognizing Opportunity, Global Opportunities, Business Planning, Market Analysis, Legal Environment, Business Strategy, Marketing, Financing and Management. Students will come to realize that there is a place for them in the new Global Enterprise System.

INTRODUCTION TO BUSINESS
Grades 10, 11, 12
1 Semester
Students will gain a general understanding of business, with emphasis on personal finance concepts. Students will develop an understanding of how our economy works and the opportunities available to us in the Free Enterprise System. In addition to the various aspects of the business world, topics will include: The New York Stock Exchange, Stocks and Bonds, Savings, Investments, Risk Management, The Banking System, Managing a Checking Account, and Credit—How to get it, Keep it and Manage it.
MS USER 1: WORD AND EXCEL
Grades 9, 10, 11, 12
1 Semester
Students who complete this course will be prepared for success on the MOUS Word and Excel certification tests that are given at area test centers. Whether in the job market or in education, students who hold MOUS certification gain significant advantages over their non-certified competitors. Good keyboarding skills are important in this course.

MS USER 2: POWERPOINT AND ACCESS
Grades 9, 10, 11, 12
1 Semester
Students who complete this course will be prepared for success on the MOUS PowerPoint and Access certification tests that are given at area test centers. Whether in the job market or in education, students who hold MOUS certification gain significant advantages over their non-certified competitors. This course also includes Outlook and Integration assignments. Good keyboarding skills are important in this course.

VISUAL BASIC I
Grades 9, 10, 11, 12
1 Semester
Prerequisite: Algebra 1
*This course may be taken as the 12th grade Mathematics experience.*
Will count toward the Visual, Applied and Performing Arts graduation requirement.
This is an introductory level course designed to familiarize students with beginning concepts and skills in computer programming. This course incorporates experience with the VISUAL BASIC language. During the course, students are exposed to programming language, procedures, design, and problem solving. Students are expected to work independently and demonstrate their problem solving skills through the use of computer operation and program planning. Students are engaged in proficient demonstration of their skills by constructing appropriate algorithms and code for computer-assisted problem solving.
DESIGN AND TECHNOLOGY

ELECTRONICS & CONTROL
Grades 9, 10, 11, 12
1 Semester
Prerequisite: Modern Technologies
This course may be counted as a 12th grade Mathematics experience.
Will count toward the Visual, Applied and Performing Arts graduation requirement.
The Electronics and Control class will provide each student with the opportunity to develop skills and knowledge in electronics and associated applications, enabling him/her to successfully enter this exciting and constantly changing career field. Students will be exposed to fundamental electronics and associated control concepts. The operation of components such as batteries, switches, resistors, potentiometers, LEDs, capacitors, logic gates, solenoids and relays will be examined. Also covered in this course is bread boarding, soldering, use of hand tools, and the proper usage of a wide array of testing equipment. Project based instruction will provide the student with opportunities to take part in extensive hands-on group and individual laboratory activities.

ENGINEERING PROJECTS
Grades 9, 10, 11, 12
1 Semester
Prerequisite: Modern Technologies
This course may be counted as a 12th grade Mathematics experience.
Will count toward the Visual, Applied and Performing Arts graduation requirement.
The Engineering Projects class builds on skills taught in the Modern Technologies with emphasis on designing and implementing a student project. Students will be able to fully realize their ideas by blending the creative design process with realistic problem-solving activities. Students will continue to develop their technological problem solving skills as they work with structural, mechanical, electrical and computer-control activities. To encourage creativity, most assignments are open-ended and range from instructor-planned to student-generated, with students gradually assuming more control over projects as the course progresses. Each student’s final project will be based on personal interests and will incorporate problem-finding, as well as problem solving.

MODERN TECHNOLOGIES
Grades 9, 10, 11, 12
1 Semester
Will count toward the Visual, Applied and Performing Arts graduation requirement.
The Modern Technologies class is designed so that students can blend the creative design process with realistic problem solving activities, giving them an opportunity to fully realize ideas. Students will discover their place on the engineering team and determine if their aptitudes and interests are in the realm of the scientist, the engineer, the technician, or the craftsman. The course will cover the engineering team; the process of design; technical communications; materials science; modeling processes and prototyping; and realistic design projects. Projects relating to several engineering fields are included so students can experience different roles within the team and advance their career awareness and direction.

ROBOTICS & AUTOMATION
Grades 9, 10, 11, 12
1 Semester
Prerequisite: Modern Technologies
This course may be counted as a 12th grade Mathematics experience.
Will count toward the Visual, Applied and Performing Arts graduation requirement.
The Robotics and Automation class introduces concepts that will allow students to function productively in industrial
automation both from an applications (engineering) position, as well as a service (maintenance) type position. Students use robotics with programmable controllers, as well as conventional control systems to solve problems in an industrial flexible manufacturing laboratory. The Robotics curriculum trains students on various types of electrical equipment, such as DC and AC motors, transformers, state-of-the-art test equipment, computer-based robot control, and programmable logic controllers. Troubleshooting hardware and software systems of an automated system, along with concepts of how the two are integrated are important parts of the training.

**TECHNICAL DRAWING/CAD**

Grades 9, 10, 11, 12  
2 Semesters  
Prerequisite: Algebra I (may be concurrent)  
Will count toward the Visual, Applied and Performing Arts graduation requirement.

Technical Drawing/CAD is recommended for students interested in engineering, technical drawing, animation, graphic design, architecture, interior design or any of the construction or manufacturing areas. At some point in our lives all of us will need the ability to communicate an idea graphically. This course presents the various basic fundamentals of drafting and computer-aided drawing (CAD). Areas covered are: sketching, use of drawing equipment, sectional views, 3D pictorials, and dimensioning. Students will complete drawings using both traditional instruments and Auto Cad software. Employability skills are emphasized. This course and the succeeding courses show relevant math tie-ins and real life application of math principles.

**ADVANCED TECHNICAL DRAWING/CAD**

Grades 10, 11, 12  
2 Semesters  
Prerequisite: Technical Drawing/CAD  
*This course may be counted as a 12th grade Mathematics experience.*  
Will count toward the Visual, Applied and Performing Arts graduation requirement.

Students will gain a sound understanding of points, planes and lines, and their relationships between different views. This course is essential to developing skills needed to allow the student to later move into computer generated 3D design. Areas covered are advanced auxiliary, development and intersection, threads and fasteners, descriptive geometry, cams and gears, welding drawings, and detail and assembly drawings. Integration of previously learned computer skills and advanced application of AutoCAD's abilities will be integrated into the completion of applicable assignments. Employability skills are emphasized. High ability in this course can lead to promising careers in engineering, CAD, and other technical design fields.
ENGLISH

If a student is uncertain of course choices (including Honors and AP courses) they should discuss their options with their current teachers.

ENGLISH 9
Grade 9
2 Semesters
Required for graduation
Students will develop literature, public speaking, language, and composition skills by exploring major literary themes in a variety of genres (fiction, nonfiction, poetry, and drama). Themes include: Reality Perception, Relationships, Expectations and Turning Points. Particular emphasis is placed on student’s ability to draw conclusions and support their opinions. A personal and analytical composition is required for each major theme examined. Students are introduced to current research techniques. At least one Shakespearean play is read.

ENGLISH 9 HONORS
Grade 9
2 Semesters
Meets the English 9 graduation requirement
Students will develop literature, public speaking, language, and composition skills by exploring major literary themes in a variety of genres (fiction, nonfiction, poetry and drama). Themes include: Reality perception, Relationships, Expectations and Turning Points. Particular emphasis is placed on student’s ability to read a variety of selections on a related theme, draw conclusions and support their opinions. A personal and analytical composition is required for each major theme examined. Students are introduced to current research techniques. At least one Shakespearean play is read. Students will be assigned reading, writing and research not required in the regular English 9 class.

ENGLISH 9 LAB
Grade 9
2 Semesters
To be taken simultaneously with English 9
Recommendation only.
English 9 lab is designed to support 9th grade students who need support in gaining strong skills in reading and writing that are necessary to their success in future high school and college courses. Potential students are identified on the basis of their performance on objective assessments and past achievement. English 9 Lab will provide an elective credit toward graduation but will not fulfill any departmental requirements.

ENGLISH 10
Grade 10
2 Semesters
Prerequisite: English 9
Required for graduation
This class will introduce the excellence and variety of American Literature. The course will begin with the oral tradition of the native inhabitants and the writings of early explorers of The New World; move into the chronicles and meditations of the Puritans, to the documents of our nation’s founders; and finally, to the identifiable voices of the early Romantics. The second semester will concentrate on post-Civil War Literature, the modern era, and the contemporary period. Students will examine literary texts in their political, cultural and intellectual contexts as they develop their own skills as writers and critical readers.
ENGLISH 10 HONORS

Grade 10
2 Semesters
Meets English 10 graduation requirement
This two-semester course is a chronological survey of American Literature from the Native Americans to Contemporary Authors. Numerous supplementary readings and essays will be required. Students will be required to analyze literature from several critical perspectives and will be expected to do in-depth research.

JOURNALISM

Grades 9, 10, 11, 12
2 Semesters
This is a course for students who like to write! It emphasizes journalistic writing styles and skills necessary in publication production. Students will practice interviewing techniques and editing skills as they write news stories, features, sports stories, editorials and reviews. They will also examine the role of the press, journalistic law and ethics, in addition to learning such production skills as copy reading, headline writing, page design, typography, photography, and advertising. This course prepares students to work on the school yearbook. While it is open to seniors, students interested in journalism are advised to elect it before their senior year so they may advance to work on a publication.

NEWSPAPER

Grades 10, 11, 12
2 Semesters
This course may be counted as a 12th grade English experience.
The Newspaper class offers advanced work in newspaper production. The class produces the Lion’s Roar on a monthly basis by researching and writing stories, taking photos, creating graphics, designing pages, and selling advertising. InDesign CS software and Macintosh computers are used. Students practice research, interview and writing skills along with applying the principles of graphic and layout design. Independent thinkers, good writers and talented artists are encouraged to take this class.

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION

Grade 12
2 Semesters
Successful completion of British Literature or Classical Literature is strongly recommended.
AP English is a college-level course that requires extensive reading and writing. The focus is on analyzing classic novels, essays, poetry and plays and then writing critical literary essays in preparation for the Advanced Placement Literature and Composition Test that is given nationally in May of each year. Essays will be written both as homework and as timed writing in class. Oral presentations are required and comprehension tests are given over the literature before it is discussed in class. The fourth quarter includes the writing of a research paper exploring a literary topic.

BRITISH LITERATURE

Grades 11, 12
2 Semesters
Students will experience a survey of British literature from the 10th century through the present with emphasis on English history and the evolution of modern thought and expression. Students will find mysticism, romance and high adventure, as well as political satire and intrigue as they immerse themselves in the literary masterpieces that are read in this course. Lively discussions ensue as students analyze poetry, plays and essays. Writing assignments include personal and analytical essays, research projects and a variety of well-developed expository and creative compositions.
CLASSICAL LITERATURE & THOUGHT
Grades 11, 12
2 Semesters
This challenging college preparatory course is designed to give students a broad liberal arts experience. Focus is on Great Literature and Philosophy of the Western World from ancient Greece and Rome to the early 20th Century and is supplemented with guest speakers and field trips for closer study. Students will write several papers, do in-depth research, and write numerous essay tests.

READING & WRITING FOR THE COLLEGE BOUND
Grade 12
2 Semesters
To be successful in college, students must be able to read and comprehend large volumes of information. They must be able to synthesize what they have learned and present it in written form. The purpose of this course is to give students the opportunity to learn and practice those reading, writing and study strategies that will aid them as they move into college-level courses.

TWENTIETH CENTURY PERSPECTIVES
Grades 11, 12
2 Semesters
Twentieth Century Perspectives is designed for students interested in examining contemporary literature and changing perspectives. Using twentieth century literature, film excerpts and philosophical essays, the course traces shifts in thinking and expression from the early 1900s to the present and discusses issues that have influenced the development of modern thought. Organized around the universal themes of alienation, disillusionment, the role of technology, and restoration, Twentieth Century Perspectives also introduces students to literary theory (Marxism, Feminism, Deconstruction, Existentialism, Psychoanalytic and Reader Response).

WORLD LITERATURE
Grades 11, 12
2 Semesters
Following a thematic approach to literature from around the world, students will expand their communication and analytical skills, as they develop a deeper understanding of enduring issues and problems that cross time and culture. Including study of world religions and modern parallels to ancient ideas, this course introduces students to literary masterpieces from early Greek and Roman civilizations, the Middle Ages, the Renaissance period, the Age of Romanticism and finally the Age of Realism.

FYI! 11th Grade English Choices
Juniors are required to earn credit in a 2 semester, literature based course.
Students may choose from:
- World Literature
- 20th Century Perspectives
- Classical Literature & Thought
- British Literature
MATHEMATICS

If a student is uncertain of course choices (including AP courses) they should discuss their options with their current teachers.

ALGEBRA 1
Grade 9
2 Semesters
Required for graduation
Algebra 1 is a high school graduation requirement that begins to build the comprehensive mathematical knowledge base students need to move on to higher-level mathematics courses. This course is rich with mathematical investigations and applications that encourage exploration of number systems, number sense, data, patterns, and relationships. There is also an introduction to geometry, data analysis, discrete mathematics, and statistics.

ALGEBRA 2
Grades 9, 10, 11, 12
2 Semesters
Required for graduation
Prerequisite: Geometry
This is a preparatory course for entrance into college. The increasing use of Algebraic methods in all disciplines and professions has made algebra the fundamental tool for mathematical applications. This course will focus on the analytical use of algebra to solve both theoretical and real world problems. This course builds upon concepts taught in Algebra 1 and Geometry while adding new concepts to the student’s repertoire. Algebra 2 continues the study of exponential and logarithmic functions and expands student’s use of function families to include rational and trigonometric functions. The topic of conic sections fuses algebra with geometry. The purpose of Algebra 2 is to give students a rigorous understanding of the theoretical study of mathematical patterns and relationships and the language that allows us to make sense of the mathematical symbols.

ALGEBRA 2 IN THE WORKPLACE
Grades 10, 11, 12
2 Semesters
Prerequisites: Geometry
Meets the Algebra 2 graduation requirement
This is a preparatory course for entrance into college or the workplace. Students who plan a college major in engineering, mathematics and/or the medical sciences are advised to take the Algebra 2 course. Students will develop computational skills and mathematical understanding that algebraic thinking is an accessible and powerful tool that can be used to model and solve real-world problems. These problems can be found all around us: the workplace, the sciences: technology, engineering and mathematics. This course builds upon concepts taught in Algebra 1 and Geometry while adding new concepts and relating them to workplace applications. Applying Algebra 2 concepts to real-world problems such as scheduling and networks, students experience both the complexity of such problems and their mathematical connections. Companies such as UPS, Fed Ex, Delta Airlines, hospitals, and others all apply Algebra 2 concepts to solve these and many other workplace problems.
ALGEBRA 2 IN THE WORKPLACE LAB
Grades 10, 11, 12
2 Semesters
To be taken simultaneously with Algebra 2 in the Workplace and teacher recommendation required.
Potential candidates are identified based on previous math performance. Student candidates for this lab and their parents will be contacted by counselor and/or lab facilitator during the enrollment window.
Algebra 2 Lab is designed to help students who do not have a strong foundation in the algebraic skills necessary for success in Algebra 2. It is designed for those who have consistently experienced difficulty in their math courses and on various assessments. When taken in conjunction with Algebra 2, this course will help them build a strong foundation upon which to build for success in more advanced mathematics courses. Potential candidates are identified on the basis of their performance on objective assessments and past achievement. Algebra 2 Lab will count as an elective credit toward graduation, but will not fulfill any departmental requirements.

DATA ANALYSIS AND PROBABILITY
Grades 11, 12
2 Semesters
Prerequisite: Algebra 2 or Algebra 2 in the Workplace
Data Analysis and Probability is a preparatory course for entrance into college or the workplace. This course moves away from the theoretical computation to focus on the statistical thinking behind data gathering and interpretation and probability or chance. This course reflects the way working statisticians contribute to our understanding of the world. It also helps students become more discerning consumers of data and statistics, information, and gaming; teaching students to look closely at what the numbers from surveys, election polls and medical studies are really saying.

FUNCTIONS, STATISTICS, AND TRIGONOMETRY (FST)
2 semesters
Grades 11, 12
Prerequisite: Algebra 2 or Algebra 2 in the Workplace
FST is appropriate for the serious math student who has met the prerequisites and is a preparatory course for the entrance into college or the workplace. Students may select to sequence this course before or after Data Analysis and Probability. Upon completing Algebra 2 some students may desire additional background in advanced functions before taking Pre-Calculus and may elect this course to prepare them for future math work. This course builds on Algebra 2 concepts generating greater understanding and computational skill in the use of advanced functions. The first semester engages students in polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities, and matrices. During the second semester students will expand their mathematical understanding of trigonometry through a variety of topics that include application of trigonometric functions, trigonometric equations, The Law of Sines, and Law of Cosines. This course ends the year with data analysis interpretation. Statistical thinking and reasoning are emphasized to provide greater understanding in how working statisticians contribute to our understanding of the world.
GEOMETRY
Grades 9, 10, 11, 12
2 Semesters
Required for Graduation
Prerequisite: Algebra 1
In this course, students explore geometric concepts analytically, inductively, and finally deductively, after learning definitions, properties of congruencies, and postulates of geometry. Students will practice algebra skills independently and in applications to geometric figures. Concepts covered include mathematical reasoning, geometric figures and properties, and transformations.

PRE-CALCULUS
Grades 10, 11, 12
2 Semesters
Prerequisite: Algebra 2
This course is designed to prepare a student for college level work in mathematics. Trigonometry, vectors, elementary functions, and a wide variety of other pre-calculus topics are treated. This course is highly recommended for students who wish to pursue a career in the sciences. Homework is assigned daily and the student may expect to devote 45-60 minutes daily outside of class.

ADVANCED PLACEMENT CALCULUS AB
Grades 11, 12
2 Semesters
Prerequisite: Successful completion of Pre-Calculus
Students will study the theoretical development and algebraic aspects of the differential and integral calculus of functions of a single variable. Students should expect to spend about 60 minutes daily in outside preparation. Upon successful completion of the AP Calculus AB exam, students may receive college credit and/or placement for one semester of college mathematics.

ADVANCED PLACEMENT STATISTICS
Grades 11, 12
2 Semesters
Prerequisite: Algebra 2
Students will study the major concepts and tools for collecting, analyzing and drawing conclusions from data. This course covers the content of the AP Statistics needed for the Advanced Placement test given in May. Upon successful completion of the AP exam, students may receive credit, advanced placement or both, for one semester of college mathematics. Students should expect to spend about 60 minutes daily in outside preparation.
MUSIC

** All music courses will count toward the Visual, Applied and Performing Arts Graduation Requirement.**

VOCAL MUSIC
Choirs are involved in several home concerts, home football games, district and state choral festivals, solo and ensemble festivals, and local events throughout the year. The students travel on a regular basis to choral competitions, festivals and special events. Students receive updated calendars frequently and are required to attend all performances unless otherwise noted. All choir members should attend Summer Choir Camp in order to prepare for the fall season. Information on this event will be available in the second semester. See the Choir Director for more details. Participants in choir must pay the district required Pay to Participate Fee.

GIRLS’ CHORUS
Grades 9, 10, 11, 12
2 Semesters
Prerequisites: None
Students of all ability levels are welcome in this non-auditioned female choir. The concentration of the class is on building vocal technique and skill in singing. Students will study a broad range of music; learn basic sight-reading skills, and introductory music theory and history. Students will participate in all home concerts, festivals and local events.

BOYS’ CHORUS
Grades 9, 10, 11, 12
2 Semesters
Prerequisite: None
Students of all ability levels are welcome in this non-auditioned male choir. The concentration of the class is on building vocal technique and skill in singing. Students will study a broad range of music; learn basic sight-reading skills, and introductory music theory and history. Students will participate in all home concerts, festivals and local events.

CHAMBER CHOIR
Grades 9, 10, 11, 12
2 semesters
Prerequisite: Audition Required
Chamber Choir is open to female students by audition only. The Chamber Choir will perform medium to advanced levels of choral literature and develop comprehensive musicianship. Students will be expected to prepare their music at a high level and should be extremely dedicated to and self-motivated in their music-making. Private lessons are highly recommended for members of this ensemble. Students will participate in all home concerts, festivals and local events. Auditions for this ensemble occur in the spring.

LYON SINGERS
Grades 10, 11, 12
2 semesters
Prerequisite: Audition Required
Open by audition only, Lyon Singers is the most advanced choral ensemble and is highly competitive. Music performed in this ensemble is of the highest quality and is quite challenging. Students will be expected to prepare their music at a high level and should be extremely dedicated to and self-motivated in their music making. Private lessons are highly recommended for members of this ensemble. Students will participate in all home concerts, festivals and local events. Auditions for this ensemble occur in the spring.
INSTRUMENTAL MUSIC
Instrumental music classes allow students to perform four home concerts each year. Students rehearse for and travel to special events outside of the regular school day as part of this co-curricular course. Students are given updated calendars frequently and are required to attend all practices and performances, unless otherwise noted. Participants in band must pay the district required Pay to Participate Fee.

PIANO LAB
Grades 9, 10, 11, 12
1 Semester
No prerequisite. This course may be repeated for credit.
Piano Lab is an individualized beginning piano class for students who wish to learn how to read music. Students begin with basic notation and work toward the use of two hands. Keyboards and pianos will be available for student use during school hours and on a limited basis after school. Students do not need a keyboard or piano at home to be successful in this course. Some performance outside of class may be necessary later in the semester.

SYMPHONIC BAND
Grades 9, 10, 11, 12
2 Semesters
Prerequisite: Middle School Band or audition
Symphonic Band is open to all students who want to continue their study of instrumental music. While the overall goal is to develop comprehensive musicianship through performance of quality musical literature, the class will focus on building the techniques that are necessary to play a musical instrument well, individually and as a part of a larger performance. Symphonic Band students will participate in four to five concerts throughout the school year.

WIND ENSEMBLE
Grades 9, 10, 11, 12
2 Semesters
Prerequisite: Audition Required
Wind Ensemble is the most advanced instrumental ensemble. It is open by audition only and is very competitive. Music performed in this ensemble is only of the highest quality and is quite challenging. Application of learned musicianship skills is practiced every day. Expectations are very high; good attitude and dedication are necessities. Auditions for this ensemble will be held in the spring and will include all major scales from memory, chromatic scale and sight-reading.

EXTRA-CURRICULAR OPPORTUNITIES IN MUSIC
Extra-curricular opportunities for after school music programs include Jazz Studies, South Lyon Percussion, the “Pride of Lions” Marching Band, Vocal Jazz Choir, Varsity Women’s Choir, Pit Orchestra, the Spring Musical, Pep Band, and Color Guard. Inclusion is by audition only and students must commit to attending all practices and competitions at state and national levels. Students interested in extra-curricular choral ensembles must be enrolled in a curricular choral ensemble to be eligible for audition. See the band or choir instructor for more information.
**PERFORMING ARTS**

**All Performing Arts courses will count toward the Visual, Applied and Performing Arts Graduation Requirement.**

**DRAMA**
Grades 9, 10, 11, 12
1 Semester
Students will learn basic acting, speaking and improvisational skills, as well as techniques for speaking in front of others to gain poise. Students will study various forms of dramatic productions and perform skits in class. Students will be required to see the SLHS main stage production if they are not part of the cast or crew.

**THEATRE CRAFTS**
Grades 9, 10, 11, 12
1 Semester
Students will gain the “behind the scenes” knowledge and skills necessary to put a show together- publicity, set design, flat construction, costuming, props, lighting and sound. In addition, each student is required to work on a crew for the current main stage production.
PHYSICAL EDUCATION

FITNESS AND LIFETIME SPORTS
Grades 10, 11, 12
1 Semester
Prerequisite: Foundations of Health and PE/Healthy Life Habits
Lifetime Sports teaches students the basics of archery, bowling, tennis, pickle ball, table tennis, and badminton. Grades will be determined by performance and written tests. FEES WILL BE CHARGED FOR BOWLING. Alternate activities will be offered when financial hardships occur.

FITNESS AND TEAM SPORTS
Grades 10, 11, 12
1 Semester
Prerequisite: Foundations of Health and PE/Healthy Life Habits
This class will offer flag football, basketball, soccer, softball, and volleyball.

FOUNDATIONS OF HEALTH AND PHYSICAL EDUCATION
Grades 9, 10, 11, 12
1 Semester
Required for graduation
Students are introduced to health and fitness concepts through a unique combination of classroom and physical education facilities. What is learned in the classroom is experienced through various fitness, swimming and cardiovascular fitness. Students become aware that decisions they make about their health affect them today and the rest of their lives. At the conclusion of the class, students will use data collected and information learned to begin to develop a personal fitness program.

HEALTHY LIFE HABITS
Grades 9, 10, 11, 12
1 Semester
Prerequisite: Foundations of Health and PE
Required for graduation
Students will apply the information learned in Foundations of Health and Physical Education to write, implement and evaluate a personal fitness program. Pre-fitness assessments will determine short and long-term goals. The students will be active primarily in the Fitness Center but will also participate in other facilities in the physical education area. Data logs will be maintained as students track their progress. Post-fitness assessments will be performed at the end of the semester to evaluate success in the fitness program. The class also includes CPR certification.

PERSONAL CONDITIONING
Grades 10, 11, 12
1 Semester
Prerequisites: Foundations of Health and PE/Healthy Life Habits
This class combines weight training with running, calisthenics, flexibility activities and other aspects of health and physical fitness training to improve individual strength and endurance. The 1 mile run and 1-1/2 mile run are required activities throughout the semester. Personal Conditioning offers students an experience full of rigorous physical fitness opportunities throughout the semester.
SCIENCES

If a student is uncertain of course choices (including AP courses) they should discuss their options with their current teachers.

BIOLOGY
Grade 9
2 Semesters
Required for Graduation
This introductory course will focus on five major topics: cells, heredity, evolution, living things, and ecosystems. Emphasis will be placed on the student’s ability to use scientific knowledge to describe and explain real-world objects, systems or events, predict future events, and design systems or courses of action that enable people to adapt to and modify the world around them. This course will help students develop critical thinking and interpretive skills that can be applied in other areas of their education.

ADVANCED PLACEMENT BIOLOGY
Grades 11, 12
2 Semesters
Prerequisite: Analytical Chemistry
AP Biology is a transitional course between high school and college. At the college level, this course is required before any other specific interest biology course can be taken. Therefore, AP Biology is strongly recommended for students interested in pursuing careers in the field of biology, such as medicine, marine biology, genetics, ecology, microbiology, pharmacy, botany, etc. Like all AP courses, this class requires high levels of concentration, work and study.

ANALYTICAL CHEMISTRY
Grades 10, 11, 12
2 Semesters
Meets the Chemistry graduation requirement
Prerequisites: Biology and Algebra 2 (can be concurrent).
Analytical Chemistry is designed for the student who is college-bound and planning a field of study related to the sciences. Students will study the underlying principles and theories of chemistry while using mathematical skills to solve problems. Topics include: behavior and properties of matter, types of matter, the periodic table, quantum mechanics, bonding, chemical reactions, solutions, acid/base and redox reactions, thermodynamics, and gas laws. Quantitative and qualitative laboratory work is integrated, along with numerous demonstrations. Formal lab reports are required. Homework and study will require 30-45 minutes per day. Graphic calculators and hand-held data collectors will be used. This course prepares students to move on to Physics, AP Biology and AP Chemistry.
CHEMISTRY
Grades 11, 12
2 Semesters
Prerequisite: Biology, Algebra 1 and Geophysical Science.
Meets the Chemistry graduation requirement
Chemistry is designed for the student who is college-bound and planning on a field of study in the liberal arts or who wishes to be a well-informed citizen and consumer. This course meets state-mandated chemistry benchmarks and covers the same topics as Analytical Chemistry but from the “How do I use this in everyday life?” perspective. Labs and hands-on activities are integral parts of this course, along with class discussions, research, and debates. Formal reports and presentations are required. Homework, research and study will require at least 30 min per day. NOTE: Students taking this course will not gain the necessary preparation to move on to Physics, AP Biology, or AP Chemistry.

ADVANCED PLACEMENT CHEMISTRY
Grades 11, 12
2 Semesters
Prerequisite: Analytical Chemistry, Pre-Calculus
This course will cover the content of Advanced Placement Chemistry needed for the AP test given in the spring. Kinetics, equilibrium, thermodynamics, electrochemistry, atomic structures and bonding are some of the topics covered. Laboratory work will develop analytical thinking, chemical calculations, quality evaluations, as well as written communications in the form of formal lab reports. Homework and class preparation are very important for this course and will require a minimum of 1 hour per day to complete text reading and studying. Some labs require after school time.

ENVIRONMENTAL STUDIES
Grades 11, 12
1 Semester
Environmental Studies is a research-discussion-debate course dealing with careful analysis of the various interactions that are taking place between modern humans and their environment. Issues such as overpopulation, pollution, loss of resources, destruction of biomes, and conservation will be studied. Along with the alternatives for the future, emphasis is placed on direct student involvement in specially designed research projects, discussion programs, and lab-type activities. A deep concern for the Earth and its future is a prerequisite for this course.

GEOPHYSICAL SCIENCE
Grades 10, 11, 12
2 Semesters
Meets the Physical Science graduation requirement
This class is usually taken in the sophomore year. Geophysical Science provides students with a knowledge of certain aspects of Physics and Earth Science that allows understanding in other sciences and everyday experiences such as heat exchanges in the atmosphere as they relate to weather; pressure and temperature differences that cause different geological formations; radiation of electromagnetic energy and its effect on photosynthesis; the behavior of light and the eye; electricity, electromagnetic waves and your cell phone; nuclear fission and power plants; fusion and the sun; atomic structure and chemical reactions.
PHYSICS
Grades 11, 12
2 Semesters
Prerequisite: Analytical Chemistry and Algebra 2
Meets the Physical Science graduation requirement.
*This course may be taken as the 12th grade Mathematics experience.*
Physics is designed not only for the college or technical-bound student, but also for the thinking student who is curious about natural phenomena and the interaction of matter and energy. This course covers mechanics (forces acting on mass); heat (what it is and its effects on matter); sound sources and sound propagation; wave phenomena; light as energy and as a medium for transmitting information; optics of mirrors and lenses; basic electricity and electrical effects and nuclear physics. The subject develops and expands a few basic definitions into an “inverted pyramid” of knowledge with emphasis on application of knowledge to problems, laboratory investigations and other practical applications. Homework and study require at least 45 minutes outside of class per day.

ADVANCED PLACEMENT PHYSICS C: MECHANICS
Grades 11, 12
2 Semesters
Prerequisite: Physics & Calculus AB (may be concurrent).
*This course may be taken as the 12th grade Mathematics experience.*
AP Physics C forms the first part of the college sequence for students who plan to major in engineering, chemistry and physics. This course will cover mechanics and in greater depth and greater mathematical sophistication (including calculus) than your previous physics course. Practice with problem solving is a significant part of the course. Students who are successful on the AP Physics C exam in the spring may be granted college credit or advanced placement. Students will acquire sound knowledge in the subject and develop creative thinking skills. They should plan to spend at least one hour each night in preparation for this class. Occasionally, extra time after school will be required.

GEOLOGY
Grades 11, 12
1 Semester
Geology is designed for students who have an interest in studying the composition, structure and features of Planet Earth. Such topics as rocks and minerals, rivers, glaciers, earthquakes, volcanoes, plate tectonics, national parks, and mapping are discussed in great detail. There are many lab activities and opportunities to do independent projects.

OCEANOGRAPHY AND METEOROLOGY
Grades 11, 12
1 Semester
Oceanography and Meteorology is a vast, diverse and changing field of study which introduces students to the world’s weather patterns and its oceans. Lab exercises, internet and technology based projects enhance the development of this course. Students will examine the current state of our oceans and how they affect our weather. Emphasis will be placed on the chemistry, biology and physics of these systems and how they affect human beings. The fundamentals of meteorology, along with the study of severe and unusual weather, principles of climatology, forecasting, and meteorological instruments will provide students with an in-depth understanding of how our weather works.
If a student is uncertain of other course choices (including AP courses) they should discuss their options with their current teachers.

20th CENTURY AMERICAN HISTORY
Grade 9: 2 Semesters
Required for graduation
Students will examine the history of the United States from its emergence as a world power (late 1800s) to present day. Major eras studied will include: Imperialism, WWI, the 1920s, The Great Depression, WWII, Cold War and Contemporary America. Students will learn to place major events of the century on a timeline and analyze their causes and effects. Students will use a variety of methods for historical evaluation and will begin to develop the critical thinking skills necessary to interpret present day events.

WORLD STUDIES
Grade 10: 2 Semesters
Required for Graduation
Students will study societies—past and present—from all over the world, as well as modern developments of global significance. By examining how decisions made in the past impact the present and future, students will build a common memory of where humankind has been. Within a historical and geographical context, students will develop comparative and casual analyses, interpret the historical record, and construct sound historical arguments and perspectives on which informed decisions in contemporary life can be made.

GOVERNMENT
Grade 11, 12: 1 Semester
Required for graduation
This is a one semester course required for all juniors and examines the body of rules by which people must live. The rules make up what is commonly called law. Before law has meaning, it must have structure, function and application. From your study of government, you will learn how laws come to be made, how they function and why their application has meaning for you and others in the United States.

ADVANCED PLACEMENT GOVERNMENT AND POLITICS
Grades 11, 12: 1 Semester
AP Government is for advanced social studies students wishing to prepare for the advanced placement test given each spring. This course includes the study of general concepts of government as well as various groups, people and ideas of American politics. Students will be expected to demonstrate in written and oral form knowledge of a variety of theoretical perspectives and explanations for various behaviors and outcomes. Students will be expected to complete extensive readings and writings on political theory and politics in action in addition to taking the AP exam in the spring. Successful completion of AP government will fulfill the government requirement for graduation.

PSYCHOLOGY
Grades 11, 12: 1 Semester
Have you ever wondered why your friends and family behave the way they do? Are you fascinated by the wonders of the mind? Then Psychology is the class for you. Psychology is a general introduction to the study of human behavior. Such topics as human development, personality, intelligence, altered states, therapy, psychological disorders, and learning theory will be covered. Students will participate in a variety of activities and experiments designed to demonstrate various psychological concepts. This is a hands-on class that uses case studies and actual psychological tools to find the answers to the questions that plague your mind.
ECONOMICS

Grade 11, 12: 1 Semester
Required for graduation
This one semester course introduces the discipline of economics. The over-arching problem of scarcity—unlimited human wants pursuing limited resources—is the focal point of this course. In addition to macro-economics, students will study personal finance and business in a free market society. Other topics will include the stock market, taxation, productivity, marketing and advertising.

ADVANCED PLACEMENT MACROECONOMICS

Grades 11, 12: 1 Semester
Prerequisites: Algebra 2 (may be concurrent)
This course may be taken as the 12th grade Mathematics experience.
This course will focus on helping students learn to apply basic microeconomic concepts to a larger (macro) scale. Students will analyze such macroeconomic concepts as the national output (GDP), inflation, and unemployment in both the U.S. and world economies. Students will learn various economic policies and apply their knowledge to solve real world economic situations. In addition, students will gain an in-depth understanding of international finance, exchange rates and global trade. This course will cover the macroeconomic content of the Advanced Placement Exam given every spring. Successful completion of AP macroeconomics will fulfill the economics requirement for graduation.

ADVANCED PLACEMENT MICROECONOMICS

Grades 11, 12: 1 Semester
Prerequisites: Algebra 2 (may be concurrent)
This course may be taken as the 12th grade Mathematics experience.
This course will focus on helping students comprehend the principles essential for understanding basic microeconomic issues. Students will analyze how consumer behavior and production decisions are made in various market structures with an emphasis on consumer satisfaction and profit maximization. Students will also examine the labor market and the role of government as it relates to economic issues and policies. This course will cover the microeconomic content of the Advanced Placement exam that is given in the spring. Successful completion of AP microeconomics will fulfill the economics requirement for graduation.

ADVANCE PLACEMENT U.S. HISTORY will be offered during the 2012-2013 school year; this course alternates with AP World History.

Grades 11, 12: 2 Semesters
AP U.S. History is designed for juniors and seniors who want advanced study in American History. Substantial emphasis will be placed on reading and writing skills. In-depth study of our nation’s history from Colonial America through the present will prepare students for the AP U.S. History examination.

ADVANCED PLACEMENT WORLD HISTORY will be offered during the 2013-2014 school year; this course alternates with AP U.S. History.

Grades 11, 12: 2 Semesters
AP World History offers balanced global coverage with Africa, the Americas, Asia, Europe, and Oceania all represented. The Course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing different types of historical evidence. Advanced social studies students will be expected to achieve college level analytical and writing capacities, which are designed to prepare them for Advanced Placement Exam given nationally in May of each year.
WORLD LANGUAGE

CHINESE 2
Grades 9, 10, 11, 12
2 Semesters
Prerequisite: Chinese 1
Chinese II continues to introduce students to the Chinese language and culture. The emphasis is placed on developing authentic communication in Chinese relating to everyday topics such as weather, clothing, school, transportation and food. Instruction and assessment will be aligned to district, state and national world language standards. Reading and writing instruction will focus on simplified Chinese characters.

CHINESE 3
Grades 10, 11, 12
2 Semesters
Prerequisite: Chinese 2 or approval of instructor
Chinese 3 improves the student’s ability to use Chinese Languages and understand Chinese culture. Emphasis is placed on using Chinese in daily communication to talk about health, getting around town, spending time with friends and traveling to China. Students study about the various regions of China and compare life in China with their life in South Lyon. Reading and writing uses simplified Chinese characters.

CHINESE 4
Grades 11, 12
2 Semesters
Prerequisite: Chinese 3 or approval of instructor
The fourth year Chinese student will continue to improve comprehension, reading, and communications skills. Study will include review, reinforcement, and refinement of Chinese sentence pattern and vocabulary. The student will become more knowledgeable about Chinese culture and life through a brief survey of history. Throughout all activities, emphasis will be given to communication, both oral and written, in the target language.

GERMAN 1
Grades 9, 10, 11, 12
2 Semesters
Prerequisite: Motivation, a strong work ethic, an interest in and an acceptance of cultural diversity.
This course is an introduction to the German language through the development of the four basic language skills: listening, speaking, reading and writing. German culture, history and contemporary life are also examined.

GERMAN 2
Grades 10, 11, 12
2 Semesters
Prerequisite: German 1 or approval of instructor
Fundamentals learned in German 1 are reviewed and developed with the same emphasis on listening, speaking, reading and writing. Students will further examine the culture, history and contemporary life of German speaking people.
GERMAN 3
Grades 11, 12
2 Semesters
Prerequisite: German 2 or approval of instructor
Listening, reading, speaking and writing skills are broadened through review and the introduction of more detailed grammatical structures. Students will also gain a heightened awareness of German culture, contemporary life and literature.

GERMAN 4
Grades 12
2 Semesters
Prerequisite: German 3 or approval of instructor
German 4 is an advanced course that places emphasis on more individual expression in speaking and writing, while fine tuning listening and reading skills. Students will continue to increase their awareness of German history, culture, and contemporary life.

JAPANESE 1
Grades 9, 10, 11, 12
2 Semesters
Prerequisite: An interest in non-Western cultures, motivation, a strong work ethic, and a willingness to try chopsticks.
This course is an introduction to the Japanese language and culture. Students will learn to read and write the two phonetic scripts and develop basic oral communication skills in formal Japanese through dialogues and role playing activities. By examining the history, culture and contemporary life of Japan, you will gain an appreciation of this fascinating Asian nation.

JAPANESE 2
Grades 10, 11, 12
2 Semesters
Prerequisite: Japanese 1 or approval of instructor
Japanese 2 is for students who completed Japanese 1. Students will continue to work on the four major skills of language development: reading, writing, speaking and listening. Students will expand their knowledge of written Japanese to include some kanji. Informal Japanese will be introduced. In addition, culture, customs and history will be explored as part of the curriculum.

JAPANESE 3
Grades 11, 12
2 Semesters
Prerequisite: Japanese 2 or approval of instructor
Japanese 3 is for students who completed Japanese 2. Students will continue to work on reading, writing, speaking and listening skills in both formal and informal speech. Students will improve their knowledge of written Japanese and will continue to learn more kanji.

JAPANESE 4
Grades 12
2 Semesters
Prerequisite: Japanese 3 or approval of instructor
Students in Japanese 4 will gain greater insights into Japanese culture. In reading and writing, students will continue to expand their knowledge of kanji. In oral communication, they will learn to use formal and informal speech patterns. Myths, legends and folktales will be read as literature.
SPANISH 1  
Grades 9, 10, 11, 12  
2 Semesters  
Prerequisite: Motivation, a strong work ethic and interest in and an acceptance of cultural diversity.  
This course is an introduction to the Spanish language through the development of the four basic language skills: reading, writing, listening and speaking. Hispanic culture, history and contemporary life are also examined.

SPANISH 2  
Grades 9, 10, 11, 12  
2 Semesters  
Prerequisite: Spanish 1 or approval of instructor  
Fundamentals learned in Spanish 1 are reviewed and developed with the same emphasis on listening, speaking, reading and writing. Students will further examine the culture, history and contemporary life of Spanish speaking people.

SPANISH 3  
Grades 10, 11, 12  
2 Semesters  
Prerequisite: Spanish 2 or approval of instructor  
Listening, reading, speaking and writing skills are broadened through review and the introduction of more detailed grammatical structures. Students also will gain a heightened awareness of Hispanic culture, contemporary life and literature.

SPANISH 4  
Grades 11, 12  
2 Semesters  
Prerequisite: Spanish 3 or approval of instructor  
Spanish 4 is an advanced course that places emphasis on more individual expression in speaking and writing, while fine tuning listening and reading skills. Students will continue to increase their awareness of Hispanic history, culture and contemporary life.
CAREER PATHWAYS & THE SLHS CURRICULUM

The Career Pathways System offers something for everyone. Careers in each category range from those requiring little or no training after high school to those requiring graduate and post-graduate degrees. Each of the six Career Pathways encompasses a wide range of careers that call for similar worker traits, interests, strengths and skills.

Included with each Career Pathway is an extensive list of suggested elective courses that can help students develop the competencies common to careers in that Pathway. While courses that are very skill-specific may be listed under only one Pathway, others appear in several Pathways because they teach competencies and skills that are essential to success in many careers. Whether students are choosing courses to fulfill graduation requirements or to earn general elective credit, each Pathway offers a variety of choices.

High School course choices should prepare students for success at the next level of training or education. They must chart their intended course with several goals in mind: fulfilling requirements for a diploma and choosing courses that will prepare them for their next level of education. Some must consider college admission requirements, as well. Mapping out progress toward graduation is a continuous process of revision as new courses become available and unidentified interests and talents make themselves known. Career Pathways organizes course choices to help students select courses that will satisfy these goals and be relevant to their needs.

Career direction and course selection should be guided by the student’s interests, aptitudes and educational goals. Although students may choose from any of the elective courses in our curriculum, we recommend that careful consideration be given to the elective courses that are listed under the student’s Career Pathway of choice.

Arts & Communication  Business Management  Engineering/Manufacturing
Marketing & Technology  and Industrial Technology
Health Sciences  Human Services  Natural Resources
and Agriscience
**ARTS & COMMUNICATION**

The Arts and/or Communications Pathway encompasses career fields that are related to the humanities and to the performing, visual, literary, and media arts. These may include careers where employees apply their abilities in creative writing, film production, journalism, education, radio and television broadcasting, advertising, and public relations.

### Sample Careers

<table>
<thead>
<tr>
<th>High School Diploma (with Vocational Background or On-the-Job Training)</th>
<th>Community/Technical College (Certificate, Apprenticeship or Associate Degree Program)</th>
<th>College/University (Undergraduate, Graduate or Post-Graduate Programs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Worker</td>
<td>Adult Care</td>
<td>Actor</td>
</tr>
<tr>
<td>Cosmetologist</td>
<td>Commercial Artist</td>
<td>Advertising</td>
</tr>
<tr>
<td>Floral Designer</td>
<td>Daycare Provider</td>
<td>Commercial Artist</td>
</tr>
<tr>
<td>Landscaper</td>
<td>Florist</td>
<td>Computer Graphic Artist</td>
</tr>
<tr>
<td>Musician</td>
<td>Graphics</td>
<td>Journalist</td>
</tr>
<tr>
<td>Sign Painter</td>
<td>Landscape Architect</td>
<td>Language Interpreter</td>
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<tr>
<td>Typesetter</td>
<td>Photographer</td>
<td>Meteorologist</td>
</tr>
<tr>
<td>Set Designer</td>
<td>TV Production</td>
<td>Teacher</td>
</tr>
<tr>
<td>Window Designer</td>
<td>Web Design</td>
<td>Librarian / Media Specialist</td>
</tr>
<tr>
<td>Cruise Ship Entertainer</td>
<td>Makeup Artist</td>
<td>Web Design</td>
</tr>
<tr>
<td>Barber</td>
<td>Script Writer</td>
<td>Writer</td>
</tr>
<tr>
<td>Special Events Planner</td>
<td>Ghost Writer</td>
<td>Medical Illustrator</td>
</tr>
<tr>
<td>Nightclub Entertainer</td>
<td></td>
<td>Photojournalist</td>
</tr>
<tr>
<td>Ornamental Metal Worker</td>
<td></td>
<td>Art Therapist</td>
</tr>
</tbody>
</table>

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BUSINESS, MANAGEMENT, MARKETING & TECHNOLOGY

The Business, Management, Marketing & Technology Pathway includes career fields related to the business environment and may include sales, marketing, hospitality and tourism, computer information systems, finance accounting, office administration, personnel, economics, management and computer information systems in public, corporate or entrepreneurial business settings.

### Sample Careers

<table>
<thead>
<tr>
<th>High School Diploma (with Vocational Background or On-the-Job Training)</th>
<th>Community/Technical College (Certificate, Apprenticeship or Associate Degree Program)</th>
<th>College/University (Undergraduate, Graduate or Post-Graduate Programs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Teller</td>
<td>Accounting Clerk</td>
<td>Accountant</td>
</tr>
<tr>
<td>Bookkeeper</td>
<td>Administrative Assistant</td>
<td>Advertising Executive</td>
</tr>
<tr>
<td>Computer Data Entry</td>
<td>Executive Secretary</td>
<td>Budget Analyst</td>
</tr>
<tr>
<td>Computer Repair</td>
<td>Building Manager</td>
<td>Computer Programmer / Analyst</td>
</tr>
<tr>
<td>Food Service</td>
<td>Computer Network / Repair</td>
<td>Computer Systems</td>
</tr>
<tr>
<td>Office Support Staff</td>
<td>Court Reporter</td>
<td>Economist</td>
</tr>
<tr>
<td>Retail Sales</td>
<td>Estimator</td>
<td>Corporate Sales</td>
</tr>
<tr>
<td>Travel Agent</td>
<td>Hotel Management</td>
<td>Loan Officer</td>
</tr>
<tr>
<td>Receptionist</td>
<td>Web Design</td>
<td>Personnel Officer</td>
</tr>
<tr>
<td>Payroll Clerk</td>
<td>Entrepreneur</td>
<td>Marketing Executive</td>
</tr>
<tr>
<td>Postal Clerk</td>
<td>Business Sales</td>
<td>Web Design</td>
</tr>
<tr>
<td>Printing Press Operator</td>
<td>Fashion Merchandising</td>
<td>Strategic / Corporate Planning</td>
</tr>
<tr>
<td>Grocery Clerk</td>
<td>Cosmetology Management</td>
<td>Human Resources Administration</td>
</tr>
<tr>
<td>Claims Clerk</td>
<td>Paralegal / Legal Assistant</td>
<td>Insurance Agent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Attorney</td>
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<tr>
<td></td>
<td></td>
<td>Auditor</td>
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<tr>
<td></td>
<td></td>
<td>Financial Planner / Advisor</td>
</tr>
</tbody>
</table>
The Engineering, Manufacturing & Industrial Technology Pathway incorporates career fields related to the technologies necessary to design, develop, install or maintain physical systems. They may include engineering and related technologies, architecture, drafting, mechanics and repair, manufacturing technology, precision production and construction.

<table>
<thead>
<tr>
<th>Sample Careers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High School Diploma</strong> (with Vocational Background or On-the-Job Training)</td>
</tr>
<tr>
<td>Auto Body Technician</td>
</tr>
<tr>
<td>Carpenter</td>
</tr>
<tr>
<td>Climate Control Mechanic</td>
</tr>
<tr>
<td>Machine Tool Setter</td>
</tr>
<tr>
<td>Custodian</td>
</tr>
<tr>
<td>Roofer</td>
</tr>
<tr>
<td>Security System Installer</td>
</tr>
<tr>
<td>Welder</td>
</tr>
<tr>
<td>Diesel Equipment Operator</td>
</tr>
<tr>
<td>Brick Layer</td>
</tr>
<tr>
<td>Machinist</td>
</tr>
</tbody>
</table>

| **Community/Technical College** (Certificate, Apprenticeship or Associate Degree Program) |
| Auto Repair Technician |
| Building Construction Technician |
| Chemical Technician |
| Computer-Aided Designer |
| Heating & Air Conditioning |
| Industrial Electronics Technician |
| Pipe Fitting |
| Surveyor Technician |
| Welding Equipment Maintenance |
| Hydraulic Assembly |
| Electronics Technician |
| Broadcast Communications Technician |
| Aviation Maintenance Technician |
| Plumber |
| Electrician |
| Facilities Management |

| **College/University** (Undergraduate, Graduate or Post-Graduate Programs) |
| Architect |
| Automotive Engineer |
| Chemical Engineer |
| Computer Analyst |
| Computer Technician |
| Computer Programmer |
| Mechanical Engineer |
| Surveyor |
| Materials Engineer |
| Robotics Technology / Engineering |
| Biomedical Engineer |
| Industrial Design |
| Operations & Systems Research |
HEALTH SCIENCES

The Health Sciences Pathway encompasses careers that are concerned with the promotion of health, as well as the treatment of injuries, condition and disease. These may include medicine, dentistry, nursing, therapy, rehabilitation, nutrition, fitness and hygiene.

### Sample Careers

<table>
<thead>
<tr>
<th>High School Diploma (with Vocational Background or On-the-Job Training)</th>
<th>Community/Technical College (Certificate, Apprenticeship or Associate Degree Program)</th>
<th>College/University (Undergraduate, Graduate or Post-Graduate Programs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Caretaker</td>
<td>Administrative Clerk</td>
<td>Chemist</td>
</tr>
<tr>
<td>Clinical Assistant</td>
<td>Emergency Medical Technician</td>
<td>Chiropractor</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>Industrial Hygiene</td>
<td>Dentist / Physician</td>
</tr>
<tr>
<td>Dietary Aide</td>
<td>Medial Assistant</td>
<td>Registered Nurse</td>
</tr>
<tr>
<td>Home Health Aide</td>
<td>Pharmacy Technician</td>
<td>Nutritionist / Dietician</td>
</tr>
<tr>
<td>Medical Office</td>
<td>Physical Therapy Assistant</td>
<td>Pharmacist</td>
</tr>
<tr>
<td>Nurse’s Aide</td>
<td>Massage Therapist</td>
<td>Physical Therapist</td>
</tr>
<tr>
<td>Physical Therapy Aide</td>
<td>Surgical Technician</td>
<td>Psychologist</td>
</tr>
<tr>
<td></td>
<td>Veterinary Assistant</td>
<td>Respiratory Therapist</td>
</tr>
<tr>
<td></td>
<td>Radiographic Technician</td>
<td>Teacher</td>
</tr>
<tr>
<td></td>
<td>Dental Hygienist</td>
<td>Optometry</td>
</tr>
<tr>
<td></td>
<td>Licensed Practical Nurse</td>
<td>Speech &amp; Language Pathology</td>
</tr>
<tr>
<td></td>
<td>Medical Transcriptionist</td>
<td>Health Care Administration</td>
</tr>
<tr>
<td></td>
<td>Optometry Technician</td>
<td>Veterinarian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nurse Practitioner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nuclear Medicine Technologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Art Therapist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Occupational Therapist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mortician</td>
</tr>
</tbody>
</table>
HUMAN SERVICES

The Human Services Pathway encompasses career fields related to the economic, political and social systems. This Pathway may include education, law and legal studies, law enforcement, child and family services, religion, personal services and social services.

**Sample Careers**

<table>
<thead>
<tr>
<th>High School Diploma</th>
<th>Community/Technical College</th>
<th>College/University</th>
</tr>
</thead>
<tbody>
<tr>
<td>(with Vocational Background or On-the-Job Training)</td>
<td>(Certificate, Apprenticeship or Associate Degree Program)</td>
<td>(Undergraduate, Graduate or Post-Graduate Programs)</td>
</tr>
<tr>
<td>Beauty Consultant</td>
<td>Cosmetologist Management</td>
<td>Admin. Information Specialist</td>
</tr>
<tr>
<td>Child Care</td>
<td>Crime Laboratory Technician</td>
<td>Clergy</td>
</tr>
<tr>
<td>Civil Services</td>
<td>Food Service Management</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>Corrections Officer</td>
<td>Law Enforcement</td>
<td>Lawyer</td>
</tr>
<tr>
<td>Fire Fighting</td>
<td>Legal Assistant</td>
<td>Psychology / Sociology</td>
</tr>
<tr>
<td>Flight Attendant</td>
<td>Security Management</td>
<td>Public Relations</td>
</tr>
<tr>
<td>Food Service</td>
<td>Corrections Officer</td>
<td>Social Work</td>
</tr>
<tr>
<td>Mental Health Aide</td>
<td>Court Reporting</td>
<td>Teacher / Counselor</td>
</tr>
<tr>
<td>Recreational / Support Services</td>
<td>Legal Transcriptionist</td>
<td>Historian</td>
</tr>
<tr>
<td>Usher</td>
<td>Police Evidence Technician</td>
<td>Political Scientist</td>
</tr>
<tr>
<td>Lifeguard</td>
<td></td>
<td>Archivist</td>
</tr>
<tr>
<td>Health Club Attendant</td>
<td></td>
<td>Sociologist</td>
</tr>
<tr>
<td>Home Tutor</td>
<td></td>
<td>Urban Planner</td>
</tr>
<tr>
<td>Home Health Aide</td>
<td></td>
<td>Funeral Director</td>
</tr>
<tr>
<td>Personal Assistant</td>
<td></td>
<td>Vocational Counselor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Judge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Librarian / Media Specialist</td>
</tr>
</tbody>
</table>
The Natural Resources and Agriscience Pathway includes career fields that are related to the environment and natural resources. These may include agriculture, earth science, environmental sciences, fisheries management, forestry, horticulture, and wildlife management.

**Sample Careers**

<table>
<thead>
<tr>
<th>High School Diploma (with Vocational Background or On-the-Job Training)</th>
<th>Community/Technical College (Certificate, Apprenticeship or Associate Degree Program)</th>
<th>College/University (Undergraduate, Graduate or Post-Graduate Programs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Caretaker</td>
<td>Farm Manager</td>
<td>Agricultural Engineer</td>
</tr>
<tr>
<td>Farm Worker</td>
<td>Forestry Technician</td>
<td>Agriculture / Extension Agent</td>
</tr>
<tr>
<td>Florist</td>
<td>Golf Course Management</td>
<td>Conservation Officer</td>
</tr>
<tr>
<td>Greenhouse / Nursery Assistant</td>
<td>Horticulturist</td>
<td>Oceanographer</td>
</tr>
<tr>
<td>Landscaping Assistant</td>
<td>Landscape Design</td>
<td>Landscape Architect</td>
</tr>
<tr>
<td>Parks and Recreation</td>
<td>Retail Florist Sales</td>
<td>Wildlife Management</td>
</tr>
<tr>
<td>Pest Controller</td>
<td>Nursery Worker</td>
<td>Botanist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marine Biologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chemist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Physicist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Forester</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Civil Engineer</td>
</tr>
</tbody>
</table>
Oakland Schools Career Focused Education

**Vision**
The highest achieving students in the world

**Mission**
A learning system that provides:

- Informed career preparation decisions
- Skills and knowledge (academic, technical, workplace)
- Preparation to compete

**Quality Policy**
The career focused Education department within the Oakland Schools Intermediate School District is responsible for the quality management and improvement system of the four Oakland Schools Technical Campuses. Oakland Schools and all of its departments are committed to a high performance quality operating system based on quality practices and tools to ensure high-level learner achievement and stakeholder satisfaction through customer focus, process measurement and management; continuous improvement and system excellence.

The Oakland Schools Technical Campus Southwest is accredited by the North Central Association.

**Overview**
Oakland Schools Technical Campus is an extension of your high school. By attending your high school half of the day and the technical campus the other half of the day, you are experiencing a full academic day. Our educational and training opportunities are structured with offerings we call clusters. These clusters (there are nine of them) are developed around broad occupational areas and contain many different, but related, career training options for students. A team of specialized instructors that possess State of Michigan Vocational Authorization staffs these clusters. This ensures that the staff has both the necessary technical expertise and the knowledge of best instructional methodology practices. These instructional teams are either supported by, or include academic staff. Additionally, the clusters are designed to facilitate learning, not just deliver a sequence of instruction. This allows for the student to better manage their instructional plan, work cooperatively with other students, and progress at their own pace. Clusters allow us to provide the highest level of curriculum, meet the needs of a diverse population of students, and maintain the highest level of quality possible. Clusters are designed to provide students with instruction for up to two years or more.

**Student Transportation**
Students may choose the bus services provided by their sending school district or provide their own transportation. Students who elect to drive or ride with another assume all responsibilities connected with transportation.

**Credit**
Oakland Schools Technical Campuses will recommend high school credit for students based on the local district requirement (generally 1-1/2 credit per semester) upon successful completion of the cluster requirements. Articulated and direct credits for college courses may be available based on agreements with many post secondary institutions. Credit awards for students will be based on student achievement and the agreement with the particular college or university.
Overview (cont.)

School-to-Career Opportunities
Employer training opportunities (paid an unpaid) are available through the technical campuses to students who meet qualification requirements, including: interest, technical knowledge and skills, attendance, and behavior.

Paid Training Opportunities
Instructional and Exploration Activities
- Field experience
- Coaching
- Internship
- Mentorship
- School-to-registered apprenticeship - Field Trips
- Work study
- Volunteer
- Cooperative education (provided by sending high school) - Job shadowing

Unpaid Training Opportunities
- Unpaid job placement
- Externship

Oakland Schools Technical Campus opportunities are designed to provide the student the experience of preparing for a career, however, no guarantee of employment is promised at the time of completion.

Academic Offerings
To provide for students that need to meet new State academic credit requirements for graduation, the opportunity to receive both technical (elective) and academic credit as part of their program at the SW Campus is offered through the following course offerings, if recommended by the home school. In some cases the instruction is embedded in the curriculum of the technical program and may include computer based instruction, text materials and media, instructional activities by the technical staff, and support in the cluster by highly qualified academic instructors. In other situations student may leave the cluster at designated times to attend a class held by the highly qualified academic instructor. In most cases the student is enrolled separately in the course and receives a separate grade.

The following academic credit options are offered at OSTC (Students may choose only one of the following.):

Math (one credit each)
1. 4th Math/ may be counted as a 12th grade Mathematics experience—Three levels of embedded math content TBD based on skill assessment for prescriptive instruction, use of a math application text/workbook aligned to the technical content of the particular cluster, and supplemental instruction by the CTE instructor.

Science (one credit each)
2. Biochemistry—May be used to recover 1 semester of Biology credit only; delivered by a highly qualified science instructor.

English Language Arts (one credit)
3. 12th Grade English (focus on leadership) - Pullout course, meeting state credit and HS Content Standards, delivered by a highly qualified ELA instructor.
Cluster: Visual Imaging Technology

Career Pathway: Arts and Communication

The Visual Imaging Technology Cluster provides learners the necessary skills to develop a portfolio for admission into a community college, university, specialized training programs, apprenticeship and/or freelance or traditional “for hire” employment opportunities in the Arts and Communication field.

Cluster Description
The Visual Imaging Cluster provides training for careers that communicate ideas and information to the public. It includes the areas of Graphic Communication, Design Communication, Interactive Multimedia/Design, and Audio-Video Production and Film. This cluster provides training opportunities in screen-printing, press operations and bindery, graphic layout, advertising design and marketing presentations. The student will be introduced to audio and video, and interactive media design used in radio, television, and digital media.

Technology is a significant component of the curriculum supporting the areas of designing, producing and managing digital files, 2D & 3D animation, audio, video, CD-ROM, DVD, and internet product design and production. Training includes the use of computer applications for the creation and management of unique products, or the term in industry “deliverables.”

The student can expect to use skills in business, writing, and mathematics to write a work order, creative treatment, technical specification, audio / video script, respond to a “request for proposal”, as well as calculate a project budget, determine return on investment, project close-out, and apply billing and collection processes to support entrepreneurial techniques.

Instructional Focus
Five year students will complete a core curriculum in technical, integrated academic and workplace skills. A specific career option will be determined for students based on their employment and educational goals. Second year students will be provided with an intensified instructional concentration of the students’ identified career option and/or experience through training activities and/or school-to-work and mentoring programs.

Prerequisite / Helpful Skills
Basic computer knowledge, keyboarding, word processing, verbal communication skills and good eye-hand coordination are very useful. Students must have a love for creative expression in the audio-visual arts while processing a focused attention to detail and an interest in producing high quality work.

Certification Available

High School Credit
Students may earn up to 3 elective credits per year. Some clusters provide academic credit; please refer to your high school counselor for academic credit opportunities.

College Credit
Advanced placement programs are available through Ferris State and Baker College.

Career Opportunity Examples
Some examples of career opportunities include: Graphic Communication, Design Communication, Multimedia, and Audio-Video Production and WEB site designer.
The Business Management Marketing and Technology Cluster at the Oakland Schools Technical Campuses prepares students for careers and opportunities in the business and technology fields. Students will develop essential skills for both employment and/or entry into postsecondary education at community colleges, universities, trade/technical schools and on-the-job training programs.

Cluster Description
This nationally recognized one-to-two-year program offers a variety of career options that lead to business and industry certifications. Four different career opportunities are offered, including Business Management & Ownership, Network Administration, PC Support & Helpdesk; Database Administration & Programming; and E-Commerce & Web Development; advanced placement and college articulated credit are also available. Microsoft Office Specialist training is available leading to Microsoft Office Specialist and Master Certification. Qualified students will be provided the opportunity to set for Comp Tia’s A+ certification; available through the PC Support pathway. In addition to the technical skills needed in the workforce, students receive extensive training in oral and written communications, problem solving and critical thinking, career preparation and development, research, leadership, and teamwork.

Instructional Focus
Students will focus in a specific area of interest (marketing, business management, real estate and property management, computer programming, network management, PC support, and web site foundations) and will participate in a field study (if eligible). Oakland Schools Technical Campus Southwest is a Certified MOS Testing Center. Students are certified to work in the latest emerging IT career fields. An Oracle Internet Academy was opened in the fall of 2001, which trains students in database administration and Java programming using Oracle software.

Prerequisite/Helpful Skills
Instructional delivery is primarily teacher facilitated. Consequently, students must be able to work independently and as a team member. Basic computer knowledge and keyboarding skills are essential. Basic math, communication, reading comprehension and composition, economics, speech and writing skills are necessary for success.

Certifications Available

- Microsoft Office Specialist/Master Certification
  - Word and Word Expert
  - Excel & Excel Expert
  - Power Point
  - Access
  - Outlook
- IC³—Internet & Computing Core Certification
  - Computing Fundamentals
  - Key Applications
  - Living Online
- Michigan Real Estate Salesperson License
- Customer Service Certification
- OPAC Certificate of Proficiency
- Oracle 9i SQL Certification
- CIW Associate Certification
  - Internet Business Foundations
  - Site Development Foundations
  - Network Technology Foundations
- CIW Professional Certification
- Flash MX 2004 Designer Certification
- Dreamweaver 8 Developer Certification
- Comp TIA A+
  - A+ Essentials
  - A+ Certified IT Technician
  - A+ Certified Depot Technician
  - A+ Certified Remote Support Technician
- Comp TIA Network+ Certification
- Network Fiber and Cabling Certification
- Microsoft Certified Professional (MCP)
- Comp TIA Security+
- Comp TIA DHTI+-Digital Home Technology Integration
- Cabling Installer—Certification International
- Fiber Cabling Installer—Certification International
Cluster: Business, Management, Marketing and Technology
Career Pathway: Business Management, Marketing and Technology (cont.)

Professional Student Organizations/Competitions
Students may participate in regional, state and national competitions for BPA (Business Professionals of America), DECA (Distributive Education Students of America) and Global Trade Mission.

High School Credit
Students may earn up to three elective credits. Please contact your high school counselor for academic credit opportunities related to this cluster.

College Credit
Articulation and/or direct college credit is available through Oakland Community College, Ferris State University, Macomb Community College, and Baker College (dependent upon certifications earned, credit may also be obtained at other major universities.

Career Examples
Some examples of careers in this cluster include customer service representative, assistant manager or supervisor, market research analyst, business owner/entrepreneur, technical support representative, programmer, web designer/developer, systems analyst, computer troubleshooter (pc support, software, helpdesk, and/or hardware), travel or promotions representative, or real estate and/or mortgage representative.
Cluster: Engineering and Emerging Technology
Career Pathway: Engineering/Manufacturing and Industrial Technology

Engineering/Manufacturing Technology is a one or two-year program designed to provide students with the skills necessary to prepare them to enter a four-year university, a technical school, and/or a community college or enter directly into an employment opportunity as an apprentice, trainee or skilled worker.

Cluster Description
This course is an intensive hands-on program designed to prepare the students in skills necessary to successfully enter engineering and manufacturing careers. The core/foundational skills include Fluid Power Hydraulics/Pneumatics, Design Processes (CAD), Automated Material Handling (Robotics), Electricity/Electronics, Quality Assurance, Manufacturing Processes (Machining), and Welding. Basic concepts and safety for each of these areas are taught through self-paced, computerized modules. Two academies function in relation to the cluster; the Vehicle Design and Engineering Academy (OSVDEA) was recently added to the cluster. OSVDEA is an advanced prototype vehicle design/engineering and building program and the Oakland Engineering Academy provides college preparation for engineering in several areas.

Instructional Focus
Students will be provided a core curriculum that addresses fundamental technical, academic and workplace skills for all career options. Students may determine a primary training option that meets individual career goals. Once technical skills are attained students will have opportunities for internships, apprenticeships, school-to-work programs, and field experiences related to their specific chosen career area. Instruction is provided through lectures, demonstrations, online programs, self-guided in lab training activities, and projects.

Prerequisites/Helpful Skills
Students interested in engineering and manufacturing careers should have good computer skills, a strong background in math and science, excellent written and verbal communication skills, technical drafting, industrial arts, visual concept skills, and good problem solving skills.

Certifications Available
- AutoCAD 2004 for Computer Aided Drafting
- American Welding Society (AWS) for Welding
- Inventor
- National Institute for Metalworking Skills for Machining (NIMS)
- Unigraphics—Design & Engineering
- Delmia IGRIP—Robotics/Automation
- Delmia Human Solutions
- Delmia Assemble/Disassemble
- Delmia Quest—Full factory layout and optimization
- Mobile Electronics Certification Professional (MECP)
- Digital Home Technology Integration Certification (DHTI+)
- Data Cabling Installer Certification from Certifications International
- Fiber Cabling Installer—Certification from Certifications International
- Wireless Networking—Certification from Certifications International
- A+ Certification, Comp TIA A+ Essentials
- American Welding Society OFC
- AWS SMAW
- American Welding Society GMAW
- American Welding Society GTAW
- American Society of Body Engineers CATIA Level 1 CATIA v5 General Certification
- CATIA v5 Part Design Certification
- CATIA v5 Assembly Design Certification Level 2 CATIA v5 Generative Drafting Certification
- CATIA v5 GSD1-Wireframe and Surface Certification
- Oakland Schools Academy of Vehicle Design and Engineering
- NX 6 Basic Design
- NX 6 Drafting
- NX 6 Assemblies
- Diversity Training I and II
Cluster: Engineering and Emerging Technology
Career Pathway: Engineering/Manufacturing and Industrial Technology (cont.)

High School Credit
Students may earn up to three elective credits. Please contact your high school counselor for academic credit opportunities related to this cluster.

College Credit
Articulation and/or direct credit agreements are available at Oakland Community College, Ferris State University, Schoolcraft Community College, Baker College, Kettering University, and Washtenaw Community College.

Professional Student Organizations/Competitions
• Skills USA/VICA (Vocational Industrial Clubs of America) for Welding
• Robotics International of the Society of Manufacturing Engineers (RI/SME) Student Robotic Engineering Challenge
• Oakland County Competitive Robotics Association (OCCRA)
• For Inspiration and Recognition of Science in Technology (FIRST)
• American Society of Body Engineers
• O.C.C. Tech/Prep Competition
• Michigan Industrial Technology Education Society (MITES)

Career Opportunity Examples
Some examples of career opportunities include: Simulations, Automation, Computer Aided Drafting and Design, Electricity/Electronics, Machining, and Welding & Fabricator.
Cluster: Transportation Technology
Career Pathway: Engineering/Manufacturing and Industrial Technology

The Transportation Technology Cluster provides students with the essential skills for entry into post secondary training and education programs and prepares them for employment opportunities in the transportation field.

Cluster Description
The Transportation Cluster is an intensive hands-on program designed to prepare the student with skills necessary to successfully enter into transportation careers. In this one or two-year course the student will gain core and technical skills related to gas and diesel engine theory, vehicle systems, basic mechanical principles, and the use of computerized diagnostic tools and equipment. Core curriculum includes competency in safety concepts, equipment operation, and measuring. Technical training competencies are based on state/national licensing and credentialing requirements. Qualified students may test for state and national certifications.

Instructional Focus
Students will work towards achieving competencies that will allow them to meet state and/or national certifications and/or participate in work site learning opportunities. Students will complete a common core curriculum. Specific training opportunities are available in automotive technology, collision repair, marine, medium truck, and power (heavy) equipment technology.

Prerequisite/Helpful Skills
A student interested in transportation careers needs to have solid mathematic application skills, good written and verbal communication skills, an attention to detail, deduction and reasoning skills, problem solving skills, be in good physical condition, and is able to follow step-by-step directions.

Certifications Available
• Automotive Youth Education System (AYES)
• Automotive Service Excellence (ASE) * (2 years experience with a certified employer)
• Michigan Certifications
  -Brakes
    -Steering & Suspension
    -Engine Performance
    -Electrical/Electronics
    -Manual Transmissions
    -Automatic Transmissions
    -Engine Repair
    -Heating/Air-conditioning
• Marine Technicians Fundamentals (MTF)
• ASE Collision Certification: Painting & Refinishing, Non structural Analysis and Damage Repair, Structural Analysis & Damage Repair, Mechanical & Electrical Components, and Damage Analysis & Estimating
• Michigan Licenses: Collision-Related Mechanical Repair and Unitized Body Structural Repair
• Mobile Electronics Certification Professional (MECP)
• Michigan Commercial Driver’s License

• ASE Certifications Heavy Equipment: Gasoline Engines, Diesel Engines, Drive Train, Brakes, Suspension & Steering, Electrical/Electronic Systems, and Heating, Ventilation and Air Conditioning
Cluster: Transportation Technology
Career Pathway: Engineering/Manufacturing and Industrial Technology (cont.)

High School Credit
Students may earn up to three elective credits. Please contact your high school counselor for academic credit opportunities related to this cluster.

College Credit
Articulated and/or direct credit is available through Ferris State University, Macomb Community College, Oakland Community College, Delta Community College, Lansing Community College, Jackson Community College, and Northwestern Auto Diesel.

Professional Student Organizations/Competitions
Skills USA/VICA, Michigan Industrial Technology Education Society (MITES) and American Boating and Yachting Council (ABYC)

Career Opportunity Examples
Cluster: Health Sciences
Career Pathway: Health Sciences

The Health Sciences Cluster prepares students for careers and opportunities in the health and medical fields. Students will
develop essential skills for both employment and/or entry into post secondary education at community colleges, universities,
trade/technical schools and on-the-job training programs.

Cluster Description
The Health Sciences Cluster at the Oakland Schools Technical Campuses prepares students for technical and professional
career and opportunities in the health and medical field. The cluster is designed to offer a broad spectrum of educational and
training options in diagnostic, therapeutic, informational and environmental areas, aligned to the national skill standards for
health and medical occupations. State and National certifications are available to qualifying students. Some of the training
opportunities provided include pharmacology, nursing, physical therapy, radiology, medical records and billing, optical,
dentistry, and veterinarian fields.

Instructional Focus
Students will receive instruction in core and foundation skills applicable to all careers in the health/medical field. Once core
skills are established, an individual career option will be determined for each student based on their educational and career
goals. An instructional and training plan will be established that includes appropriate training for specific career goals and/or
preparation to enter post-secondary education. Additionally, onsite training experiences may be provided at hospitals and/or
health care facilities.

Prerequisite/Helpful Skills
Science classes, particularly biology and chemistry, basic math, and computer technology are helpful to students interested in
health careers. Students should enjoy working in a team, be able to self-direct and self manage their activities, have good
verbal and written communication skills, and be able to strictly follow established procedures and processes.

Certifications Available
- CPR with AED Training (Automated External Defibrillator)
- First Aide Certification
- Basic EMT Certification
- Competency Evaluated Nursing Assistant (CENA)
- Medical First Responder

Student Organization
Health Occupations Student of America (HOSA)

High School Credit
Students may earn up to four elective credits. Please contact your high school counselor for academic credit opportunities
related to this cluster.

College Credit
Articulation and/or direct credit is available through Oakland Community College-Medical Terminology, First Responder;
Ferris State University-Safety, Medical Terminology, Basic Optics; and Baker College-Medical Terminology.

Career Opportunity Examples
After completing core and career option training some career opportunities include: medical office assistant, dental assistant,
optical technician, physical therapist aide, and occupational therapist aide. With further training and/or education, some
examples of career opportunities include: nursing, physical therapist, occupational therapist, and dental hygienist.
**Cluster: Culinary Arts/Hospitality**

**Career Pathway: Business Management, Marketing and Technology**

The Culinary Arts/Hospitality Cluster provides the learner a current and comprehensive technical training opportunity for entry into apprenticeships, community colleges and universities or for entry into advanced employment opportunities in the culinary and hospitality fields.

**Cluster Description**
This cluster prepares students for a broad background of skills and knowledge utilizing industry based tools, equipment and technology required to be productive in a modern commercial kitchen with applications in business procedures for today’s professional. Computer systems are used to place orders and produce communications through simulations of actual industry situations. Training is provided in cooking, menu design, staffing, scheduling, food preparation, and financial management for a commercial foodservice establishment. Additionally, students will contribute to the day-to-day management and operations of a restaurant and catering service.

**Instructional Focus**
Students will receive instruction in core and foundation skills applicable to all careers in the culinary and hospitality area. Once core skills are established, an individual career option will be determined for each student based on their educational and career goals. An instructional and training plan will be established that includes appropriate training for specific career goals and/or preparation to enter post-secondary education. Management training and advanced technical skill level development in one or more of the career options will take place during the second year coupled with school-to-work and other field study opportunities.

**Prerequisite/Helpful Skills**
Students interested in this career should have excellent interpersonal skills, the desire and ability to work in a team environment, and problem solving skills. High school courses should include math, computer technology, written and verbal communication, accounting, business, chemistry, and health and hygiene.

**Certifications Available**
- Serve Safe Food Handlers
- Prostart

**Professional Student Organizations/Competitions**
Students may participate in regional, state, and national competitions for Skills USA VICA (Vocational Industrial Club of America), Prostart, American Culinary Federation (ACF)-Jr. Chapter, American Culinary Federation (ACF)-Local Chapter.

**High School Credit**
Students may earn up to three elective credits. Please contact your high school counselor for academic credit opportunities related to this cluster.

**College Credit**
Students have a seamless transition to a community college offering culinary arts and/or to a culinary institute or a national apprenticeship program. College credit/articulation is currently offered through Oakland Community College, Johnson & Wales, and Mott Community College.

**Career Opportunity Examples**
Some examples of career opportunities include: Lodging Services, Convention Services, Food Production, and Food Service.
Cluster: Biotechnology and Environmental Science
Career Pathway: Natural Resource and Agriscience

Biotechnology and Environmental Science provides students with the essential skills necessary for entry into post-secondary education programs offered at community colleges and universities and/or employment opportunities in the biotechnology, agriscience, and natural resources fields.

Cluster Description
This two-year program is designed to prepare students with the skills necessary to successfully enter into the following career areas: Biotechnology, Plant Systems, Power and Structural Systems, Animal Systems, Agribusiness and Marketing Systems, Environmental Systems, and Natural Resources Systems. Science and technology are significant components of the curriculum in the areas of aquaculture, hydroponics, tissue culture technology, and natural resource management. The curriculum also includes greenhouse, landscape technology & management, organic gardening, schoolyard wildlife habitat, rain forest, animal laboratory, floristry, GPS technology aquaponics, poultry habitat, and small business management.

Instructional Focus
Students will receive instruction in core and foundation skills applicable to all careers in the biotechnology and agriscience area. An individual career option will be determined for each student based on their educational and career goals. An individual career option will be determined for each student based on their educational and career goals. An instructional and training plan will be established that includes appropriate training for specific career goals and/or preparation to enter post-secondary education. Second year students will receive an intensified concentration of education and training experience through projects, instructional activities, technical and technology rich applications that may include school-to-work and mentoring programs. Learning experiences will also include guest lectures, field trips, job shadowing, and portfolio development.

Prerequisite/Helpful Skills
Suggested high school courses include basic math, algebra, geometry, all sciences, particularly biology and basic design (art). Strong written and verbal communication skill and the ability to work independently as well as a part of a team are important interpersonal skills. The student should show a high level of interest in plants, animals, and nature along with a desire to work outdoors. Students with environmental and/or animal allergies may need to consider an alternate program.

Certifications Available
• Michigan Certified Nurseryman
• Michigan Certified Florist
• Certified Laboratory Animal Care Assistant (National)
• Certified Pet Groomer
• Certified Vet Tech Assistant
• Certified Landscape Technician
• IPM (integrated pest management)- A student must be 18 years old to take the quiz and receive this certificate.

High School Credit
Students may earn up to three elective credits. Please contact your high school counselor for academic credit opportunities related to this cluster; aquaculture, hydroponics.

College Credit
Articulation and/or direct credit are available through Ferris State University, Michigan State University, and Oakland Community College (Auburn Hills Campus).
**Cluster: Biotechnology and Environmental Science**

**Career Pathway: Natural Resource and Agriscience (cont.)**

**Career Opportunity Examples**

**Professional Student Organizations/Competitions**
Students may compete in regional, state, and national competitions for FFA, MFA (Michigan Floral Association) & MCN (Michigan Certified Nurseryman) and National Vocational Technical Honor Society.