### Lighthouse Program of Study\* - Lighthouse Design Pathway

\*Revisions (new courses or revised courses) are highlighted in red

Industry Sectors: Product Design & Innovation Pathway (Manufacturing and Product Development)
Industry Partners: Current partners include the San Francisco Exploratorium, Pro Arts Gallery, Maker Faire Bay Area, Pioneers in Engineering, Sixteen Screenprinting Boutique, TechHive, Rising Sun Energy Center, and Hack the Hood.

| Pathway Vision                               | All students at Lighthouse Community Charter High School participate in our Lighthouse Design Pathway. In this pathway, students will develop skills and knowledge in three key domains: Design Process, Product Development, and Entrepreneurship.  Students will:  create real products using the design process  work as part of design teams to develop products that meet market demands and/or a community need  develop entrepreneurial skills and knowledge to market products  develop portfolios to showcase their work  collaborate with industry professional and real world clients. |   |  |   |  |  |  |
|--|---|---|--|---|--|--|--|
| Pathway COP<br>Meeting Time:                 | <b>9th Grade Program</b> Wednesday afternoons; time varies  | 10th Grade Program<br>Wednesday afternoons;<br>time varies  | 11th Grade Program Wednesday afternoons; time varies   | <b>12th Grade Program</b> Wednesday afternoons; time varies | Graduate Pathway Outcomes (Student Learning Outcomes)                      |  |  |
| Academic Core<br>Student Cohort<br>Integrity | English 9<br>Physics  | Humanities 10 (English 10<br>& World History II)<br>Biology | Humanities 11 (English 11<br>& US History I)<br>Chemistry  | English 12<br>Ethnic Studies<br>Honors Physics              | CTE Standards for Product Design and Innovation: Students will:            |  |  |
| Math   | Integrated Math I   | Integrated Math 2   | Algebra 2  | Calculus  |  |  |  |
| Technical<br>Core/Theme<br>(CTE Sequence)    | 2-Design  | 3-D Design  Advanced  Manufacturing*  Graphic Design*       | Advanced Manufacturing* Graphic Design*  *Note: Due to master schedule shift, the Adv Many and Graphic Design will not be full re-designed course until 19-20. | Advanced<br>Manufacturing*<br>Graphic Design*               |  |  |  |
| Dual Enrollment                              | We are in the process of c<br>College.  | liscussing Dual Enrollment po                               | ossibilities with Laney College  | e and Berkeley City   | showcase their work  collaborate with industry professional and real world |  |  |

| Integrated Projects/ Common Performance Assessments                                      | 2 Thematic Integrated Units   | 2 Thematic Integrated Units   | Soap Production & Marketing Project (Chemistry)  2 Thematic Integrated Units                          | Generator Project - designing, building windmills (Physics)  King of the Hill Project - designing, building and racing Mousetrap cars (Physics)  Solar Prototype Project - designing, building and marketing solar-powered | clients.  Making, Art, and Design Learning Targets (7th & 8th Feeding Into Pathway) |
|--|---|---|---|--|---|
| Defenses or<br>Capstones   | 9th Grade End of Year<br>Reflection<br>Design Portfolios  | 10th Grade Passage<br>aligned to Pathway<br>Design Portfolios   | 11th Grade Internship<br>Project<br>Design Portfolios   | electronic devices (Physics)  12th Grade Passage aligned with Graduate Profile and Pathway   |   |
| Other Courses /<br>Electives   | Fitness<br>Ethnic Studies   | Spanish (1-3, AP)<br>Fitness  | Spanish (1-3, AP) Yoga Career and College Prep  | Spanish (1-3, AP)<br>Yoga<br>Senior Seminar  |   |
| Other Student Experiences (post-session, intersession, rituals, class trips, assemblies) | 9th Grade Retreat-<br>Summer Bridge and<br>Quarterly<br>Intercession (during our<br>week long breaks for<br>students failing classes) | Expedition related fieldwork  Intercession (during our week long breaks for students failing classes) | Expedition related fieldwork  Intercession (during our week long breaks for students failing classes) | Challenge Day  Expedition related fieldwork  Intercession (during our week long breaks for students failing classes)   |   |
| Work Based<br>Learning   | Exposure to guest<br>speakers and career  | <ul> <li>Sequence of guest<br/>speakers and career<br/>panels</li> </ul>                              | Career Interest     Inventory   | Support with major<br>selection (connected<br>to career interests)   |   |

|  | panels during community meeting Internship for a day (with 11th grade students) Career Fair           | <ul> <li>Small group mentoring on design portfolios with industry professionals</li> <li>Career Exploration: informational interview w/ workplace role model</li> <li>Job shadow/workplace visits in small groups</li> <li>Career fair</li> </ul> | <ul> <li>Career/Major research and rationale</li> <li>Internship Program</li> <li>Industry mentors in Pathway concentration classes</li> </ul> | <ul> <li>Articulation of major/career interests in personal statement(s) for college and scholarships</li> <li>Some paid internships (Genesys Works, SF Exploratorium)</li> <li>Mentorship program with industry professionals: 3-4 meetings per year to help students develop college/career plans and expand network of possibility after graduation→ shared as part of 12th capstone passage presentation</li> </ul> |
|--|---|---|--|---|
| Student<br>Leadership                                  | Reading buddy program with elementary school students  Community service program in crews (quarterly) | Community service program in crews (quarterly)  | Internship Shadow Program (11th graders bring a 10th grader to their internship for a day)  Community service program in crews (quarterly)     | 12th grade mentor program (with freshman)  Community service program in crews (quarterly)   |
| Summer Learning<br>(Summer Bridge,<br>summer learning, | Laney College CTE Summer Institute  | Laney College CTE Summer Institute  | Laney College CTE Summer Institute   |   |
| credit recovery)                                       | Hack the Hood  Girls Who Code   | Hack the Hood  Girls Who Code   | Hack the Hood  Girls Who Code  |   |

|                            |  |  | Global Glimpse (10-15  |  |
|----------------------------|--|--|--|--|
|                            |  |  | students) <u>Genesys Works</u> (5-10 students)   |  |
| College Exposure           | At least one visit to a local college (Last year students went to College of Alameda and University of San Francisco)                                    | At least one visit to a local college (Last year students went to Santa Clara and San Jose State)  YWCA Shadow Day at UC Berkeley                        | At least one visit to a local college (Last year students went to SF State and UC Davis)   | At least one visit to a<br>local college (Last year<br>students went to College<br>of Alameda, San Jose<br>State and UC Santa Cruz)                      |
| Study Tour<br>Destinations | Varies according to schedule, current partnerships and student interest  Pathway Aligned Study   | Varies according to schedule, current partnerships and student interest  Pathway Aligned Study   | Varies according to schedule, current partnerships and student interest  Pathway Aligned Study   | Varies according to schedule, current partnerships and student interest  Pathway Aligned Study   |
| Advisory Structure         | M, Tu, Th, F - 40 min per<br>day + 30 min on Wed   | M, Tu, Th, F - 40 min per<br>day + 30 min on Wed   | M, Tu, Th, F - 40 min per<br>day + 30 min on Wed   | M, Tu, Th, F - 40 min per<br>day + 30 min on Wed   |
| Personalized<br>Supports   | Resource Specialists (1.5 FTE) Reading Interventionist (1 FTE) 2 Therapists (.5 FTE each) Guidance Counselor (1 FTE) DCAC College Advisor Fellow (1 FTE) | Resource Specialists (1.5 FTE) Reading Interventionist (1 FTE) 2 Therapists (.5 FTE each) Guidance Counselor (1 FTE) DCAC College Advisor Fellow (1 FTE) | Resource Specialists (1.5 FTE) Reading Interventionist (1 FTE) 2 Therapists (.5 FTE each) Guidance Counselor (1 FTE) DCAC College Advisor Fellow (1 FTE) | Resource Specialists (1.5 FTE) Reading Interventionist (1 FTE) 2 Therapists (.5 FTE each) Guidance Counselor (1 FTE) DCAC College Advisor Fellow (1 FTE) |

| Use of expanded learning time | Writing Center<br>Teacher Office Hours | Writing Center<br>Teacher Office Hours | Writing Center Teacher Office Hours | Writing Center Teacher Office Hours |  |
|-------------------------------|--|--|-------------------------------------|-------------------------------------|--|
| (before or after school)      |  |  |                                     |                                     |  |