

# APPLICATIONS for BOARD AUTHORIZED COURSES

2017-2018

- 1. Athletic Coaching 12
- 2. Pastry Arts and Baking 12

# **Board/Authority Authorised Course Framework Template**

| School District/Independent School Authority Name        | Surrey School Board  |
|--|--|
| School District/Independent School Authority Number      | SD36   |
| Developed by   | Jamie Overgaard  |
| Date Developed   | June 1, 2016   |
| School Name  | Lord Tweedsmuir Secondary  |
| Principal's Name   | Gloria Sarmento  |
| Superintendent Approval Date (for School Districts only) |  |
| Superintendent Signature (for School Districts only)     |  |
| Board/Authority Approval Date                            |  |
| Board/Authority Chair Signature                          |  |
| Course Name  | Athletic Coaching 12   |
| Grade Level of Course                                    | 12   |
| Number of Course Credits                                 | 4  |
| Number of Hours of Instruction                           | 120  |
| Prerequisite(s)  | Physical & Health Education 10 & Recommendation of a PHE teacher.  |
| Special Training, Facilities or Equipment Required       | Teacher must be certified in BC Sports Med and National Coaching Certification Program   |
| Course Synopsis  | This course has been designed to help students learn the basic skills in order to become a successful coach. In addition, students will receive recognized community certifications that will assist them in obtaining volunteer or paid coaching/leadership positions in the community. |

#### **BAA CURRICULUM PLANNING TEMPLATE**

## **Athletic Coaching 12**

### Rationale:

Athletic Coaching 12 (AC12) is designed to develop educated coaches who have the knowledge, skills and understandings to be effective, adaptable and self-aware leaders in the community. The AC course focusses on competencies that will support both the learner in their volunteer/paid coaching roles and the youth participating in community sport groups. Certifications acquired in this course can contribute directly to employment in recreation centres or sport organizations.

AC12 combines aspects of coaching and leadership theory with modern community-based, recognized certifications. AC12 is strongly linked to the core competencies of communication and personal awareness and responsibility. The communication competency encompasses the set of abilities that students use to impart and exchange information, experiences and ideas, to explore the world around them, and to understand and effectively engage in the use of digital media. This competency is taken a step further as learners will gain the knowledge and skill necessary to communicate and motivate large groups of athletes while modifying their communication based on the age/development of their audience. The personal awareness and social responsibility competency is also heavily represented in AC12. Competency in this area will be built through self-awareness planning and experiential leadership.

The athletic coaching course has cross-curricular elements. Since a coach or community leader is often the first responder in situations requiring first aid or athletic therapy, students will gain knowledge and skill in athletic first aid and cardio-pulmonary resuscitation (CPR). Success in these areas requires a basic knowledge of human musculoskeletal anatomy. The core competency of thinking becomes a key element of injury assessment and management as it requires recalling past knowledge and applying it to real life sport injury situations.

A focus on lifelong safety, physical activity and health is valuable for both the individual student and for society as a whole. The knowledge, skills and competencies developed in AC12 will help support these concepts in self and others while maintaining a special focus on what is developmentally appropriate. Knowing how to support diversity among athletes and how to mitigate bullying situations between children or between head/assistant coaches promotes inclusion, safety and fairness. Some topics in AC12 must be approached with sensitivity and care because of their personal nature and connections to family, religious and cultural values.

Leadership is learning. Being able to demonstrate that learning through community recognized certifications is a key approach in AC 12. Community organizations such as the National Coaching Certification Program, Sport Medicine British Columbia and the British Columbia Parks and Recreation Association, Surrey Parks and Recreation and the Canadian Red Cross are valuable community partners who provide programs and certifications via AC 12.

Because leadership and coaching require a great deal of self-reflection and planning, there will be ample opportunities for multi-dimensional inquiry throughout the course.

### Goals:

- Develop an understanding of the many aspects of coaching and leadership as they relate to self, others and groups/teams
- Develop the knowledge and skills to manage diversity in sport.
- Develop an understanding of the developmental stages of children aged 6-12 and how that relates to the development of fundamental movement skills.
- Develop the knowledge and skills required to lead/coach young children.
- Gain community recognized certifications in leadership, athletic first aid and CPR

# Declaration of First People's Principles of Learning:

- Athletic Coaching supports the development of self in support of connecting with others.
- Learning is embedded in memory, history and story.
- Leading and coaching involves learning from mentors as well as those we are meant to lead.
- Leadership and learning is holistic, reflexive, reflective, experiential and relational.
- Athletic Coaching requires exploration of one's identity, philosophy and ethics.
- Becoming a leader/coach involves recognizing that some learning is sensitive and should only be shared with permission and in certain situations.

# **Declaration of Aboriginal Worldviews and Perspectives:**

The First People's Principles of Learning are inherent in the aspects included in AC 12. Athletic Coaching is inseparable from connectedness and relationships; specifically:

- Community Involvement (process and protocols)
- The Power of Story
- Experiential Learning
- Flexibility
- Leadership
- A positive learner-centered approach
- Community Engagement
- The role of the Teacher (Leader or coach)
- Local Focus

# Highlight where the Core Competences are represented in the curriculum:

Pink: Communication

Green: Personal and Social

Blue: Thinking

| DRAFT Course Title -  |  |
|---|--|
| Big Ideas   | Elaborations   |
| Leadership Development is an ongoing process.                               | An effective leader/coach must always be working towards improvement of practice.  |
| Certifications in leadership allow us to contribute to the community.       | Leadership certifications make us more knowledgeable, more skilled and more employable.                                      |
| Sport safety practices and first aid can serve the greater sport community. | Prevention and management of sport injuries improves participant safety.   |
| Developing and refining a coaching philosophy can help us be better         | Self-awareness and reflection allow us to lead more effectively.   |
| leaders/coaches.  |  |
| It is important to analyze coaching and leadership as represented in the    | Assumptions and depictions of leadership and coaching practices and styles can be analyzed and discussed in order to improve |
| community, society and media.   | our own practice.  |
|   |  |

| <b>Curricular Competencies</b>   | Elaborations   | Content  | Elaborations   |
|--|--|--|--|
| Students are expected to be able to do the following:                              |  | Students are expected to know the following:   |  |
| Principles of Coaching:  |  |  |  |
| <ul> <li>Develop coaching philosophy, ethics,<br/>objectives and style.</li> </ul> | <ul> <li>Philosophy: how we view our coaching experiences and how this will define our future planning.</li> <li>Ethics: moral judgements in coaching.</li> <li>Objectives: setting goals and balancing winning, fun and development.</li> </ul> | <ul> <li>Principles of program design,<br/>including how to define personal<br/>sport philosophy, importance of<br/>moral judgments in sport and how<br/>to refine team objectives.</li> </ul> |  |
| Understand elements of <b>diversity</b> in sport.                                  | Diversity: managing differences among youth/athletes including maturation, culture, gender, sexuality, physical and mental abilities.  | <ul> <li>Different types of diversity in<br/>athletes, children and sport.</li> </ul>  |  |
| Complete community based certifications in coaching/leadership.                    | <ul> <li>Certifications:         <ul> <li>National Coaching Certification Program (NCCP).                 Fundamental Movement Skills.                       http://coach.ca/fundamental-movement-skills-s16736</li></ul></li></ul>              | <ul> <li>The signs and symptoms of cardio-pulmonary distress and choking in infants, children and adults.</li> <li>How to operate an automatic external defibrillator (AED).</li> </ul>        | AED: An Automatic External     Defibrillator (AED) is a small, portable     easy to operate lifesaving medical     device designed to deliver an     electrical shock to a person who is     having a Sudden Cardiac Arrest (SCA). |

| Recognize and manage sport injuries and situations requiring CPR  | <ul> <li>SportMed BC.         <ul> <li>Sport First Aid Level 1</li> <li>Athletic Taping Level 1</li> <li>https://sportmedbc.com/programs/sportmed-safety/courses-and-workshops</li> </ul> </li> <li>Canadian Red Cross.         <ul> <li>CPR-C with AED</li> </ul> </li> <li>Recognize: the appearances and common situations that lead to injury.</li> <li>Manage: prevention, first aid, referral, taping and recovery of sport injuries.</li> </ul> | <ul> <li>Basic musculoskeletal anatomy and physiology as it relates to sport.</li> <li>The signs and symptoms of common sports injuries.</li> <li>Best practices in athletic taping.</li> <li>Best practices in sport safety</li> </ul> | <ul> <li>Musculoskeletal anatomy and physiology: major bones, muscles, connective tissue and joints; also the basic functions of these features</li> <li>Signs: the visual aspects to a sport injury.</li> <li>Symptoms: the sensations reported by the injured athlete.</li> </ul> |
|---|--|---|---|
| <ul> <li>Recognize developmental stages in fundamental movement skills among children aged 6-12</li> </ul>  | <ul> <li>Developmental Stages: maturational stages and skill acquisition stages</li> <li>Fundamental Movement Skills: running, jumping, throwing, catching, striking.</li> </ul>   | <ul> <li>The developmental stages of children in fundamental movement skills.</li> <li>The challenge zone for athletes/children.</li> </ul>   | Challenge Zone: knowing how to adapt an activity to balance challenge with ability in order to maximize student success and potential.  |
| Teach technical skills and tactical skills with the games approach.   | <ul> <li>Technical skills: the motor programs necessary to complete a physical movement.</li> <li>Tactical skills: combining technical skill with reading the situation and decision making.</li> </ul>  | • Physical, cognitive and social traits of children aged 6-12.  |   |
| <ul> <li>Demonstrate the ability to apply health knowledge and healthy living skills in making reasoned decisions related to their role as coaches/leaders</li> </ul> |  | <ul> <li>Concepts of coaching such as coaching styles, coaching for character, communication, games approach, skills and tactical skills</li> <li>Physical training basics.</li> </ul>  | Physical Training Basics: energy fitness, muscular fitness and the basics of periodization.   |

| <ul> <li>Explain and demonstrate safe and<br/>appropriate participation in physical<br/>activities</li> </ul>                                      |  |   |  |
|--|--|---|--|
| Community Building & Collaboration:  |  |   |  |
| <ul> <li>Employ leadership techniques to<br/>improve chances of success in a<br/>variety of physical activities among<br/>participants.</li> </ul> |  | <ul> <li>Different leadership techniques to<br/>encourage inclusion and<br/>participation.</li> </ul> |  |
| <ul> <li>Plan ways to overcome potential<br/>barriers to participation in physical<br/>activities</li> </ul>                                       |  |   |  |
| Develop communication strategies<br>for working with teams, athletes,<br>youth.  | Communication: dimensions of communication and the six step model of communication in sport. Why is communication sometimes ineffective? Coaching style and communication. | <ul> <li>The six step communication<br/>method and when to use the<br/>different forms.</li> </ul>    |  |
| Complete a coaching practicum.   | Practicum: students will work under a head coach or recreational leader to complete a minimum of 20 volunteer hours as a sport coach.                                      |   |  |

# **Board/Authority Authorised Course Framework Template**

| School District/Independent School Authority Name        | Surrey School Board  |
|--|--|
| School District/Independent School Authority Number      | SD36   |
| Developed by   | Ms. Erin C. McCabe   |
| Date Developed   | March, 2016  |
| School Name  | Frank Hurt Secondary   |
| Principal's Name   | Michael Stickley   |
| Superintendent Approval Date (for School Districts only) |  |
| Superintendent Signature (for School Districts only)     |  |
| Board/Authority Approval Date                            | November 17 <sup>th</sup> , 2016   |
| Board/Authority Chair Signature                          |  |
| Course Name  | Pastry Arts and Baking 12  |
| Grade Level of Course                                    | 12   |
| Number of Course Credits                                 | 4  |
| Number of Hours of Instruction                           | 120  |
| Prerequisite(s)  | Recommended Food Studies 10, 11 and 12 or recommendation of Foods Studies Teacher                              |
| Special Training, Facilities or Equipment Required       | Teacher must be certified in the UBC HMED diploma or equivalent and have experience in pastry arts and baking. |

| Course Synopsis | Pastry Arts and Baking is a course that focuses on more advanced skills and techniques in baking. This course will be valuable for any student considering a career as a pastry chef, employment in a bakery, |
|-----------------|---|
|                 | restaurant, catering service, or opening up a business of their own. The skills learned in this course are transferable from the classroom to the competitive service industry.                               |

#### **BAA CURRICULUM PLANNING TEMPLATE**

### Rationale:

Pastry Arts and Baking 12 is designed for learners who have an interest in baking, and who are considering a career in the baking and pastry arts industry. Using creative and critical thinking, learners work collaboratively and individually to develop products at industry standards. This course provides learning opportunities through which students can discover their interests and creativity through practical and purposeful ways.

Pastry Arts and Baking 12 is strongly linked to the core competencies of communicating and thinking. As students experiment, question and discuss the basics of pastry and baking techniques they will re-connect to prior knowledge learned in previous Foods Studies courses. At the same time, challenge themselves by thinking and discussing innovative personal creativity and design ideas derived from accessing information from the teacher, community business owners, computer software and internet programs. These competencies are broadened as learners advance their skills into the creation of original, edible art.

As they experience the creative preparation and presentation of bakery products, learners build confidence in their skill set as well as develop an awareness of the personal, social and cultural significance of baked creations. The core competency of personal and social awareness and responsibility is a significant component as learners make strong connections to their own cultural roots through the histories embedded in recipes and baking techniques. These stories will contribute to the shaping of who they see themselves as and their personal philosophy in the context of community and society. Furthermore, knowledge of the origins and history of ingredients will reinforce learner's personal philosophy and ethics.

By taking into consideration such elements as distance travelled and cost of food choice and how these decisions impact community and society on a local and global scale, will support learners in making informed decisions for their projects.

The emphasis in Pastry Arts and Baking will be on baking theory, practical knowledge and skills building, preparation skill, time management and production of baked and decorated goods. Presentation is of the utmost importance and learners will be encouraged to use their creative and artistic skills in designing and creating baking masterpieces. Self-reflection, discussion, questioning and re-designing are ongoing and encouraged throughout the course.

### Goals:

- Broaden and challenge student skill set through the use of elaborate recipes and a wider variety of equipment and ingredients to create a desired product
- Engage learners in exploring and developing their creative and design abilities through decorating techniques and displaying products
- Build knowledge, confidence and abilities that easily transfer to the workplace environment
- Encourage innovative design with computer software design programs and applications
- Develop mindfulness of social, ethical and sustainability issues when considering the use and purchasing of ingredients

# Declaration of First People's Principles of Learning:

- Pastry Arts and Baking supports the wellbeing and development of the self in regards to connecting with others and community.
- Learning is embedded in memory, history and story.
- Pastry Arts and Baking involves learning from elders, mentors, peers and the teacher.
- Learning in Pastry Arts and Baking is holistic, reflexive, reflective, experiential and relational.
- Pastry Arts and Baking requires exploration of one's identity, philosophy and ethics.
- Becoming a Pastry and Baking Artist involves recognizing that some learning is sensitive and should only be shared with permission and in certain situations.

Highlight where the Core Competences are represented in the curriculum:

Pink: Communication

Green: Personal and Social

Blue: Thinking

| DRAFT Course Title –Pastry Arts and Baking 12                               |  |
|---|--|
| Big Ideas   | Elaborations   |
| Products can be designed for life cycle.                                    | - We must develop an awareness of the footprint of ingredient choices, local vs global, fair trade vs big corporation, as well as ingredient substitutions to minimize environmental impact.   |
| Personal design interests require the evaluation and refinements of skills. | - Creative design applications challenge us to recall prior knowledge of basic skills, at the same time build new and more sophisticated talents through our reflections and adaptations generating opportunities for innovative thinking.             |
| Tools and technologies can be adapted for specific purposes.                | - Broaden and challenge our skill sets through the discussion and experimentation of elaborate recipes that require knowledge of specific equipment and techniques that take us out of the kitchen and into computer software design and App programs. |
|   |  |

| Curricular Competencies  | Elaborations  | Content   | Elaborations                                       |
|--|---|---|--|
| Students are expected to be able to do the                             | User-centred research: research done directly       | Students are expected to know the following:                  |  |
| following:   | with potential users to understand how they do      |   |  |
|  | things and why, their physical and emotional        | <ul> <li>establishment of Food Safe procedures in</li> </ul>  | establish: proper hygiene and disinfection of      |
| Applied Design   | needs,  | foods lab.  | kitchen environment, equipment and food            |
|  | how they think about the world, and what is         |   | storage areas.                                     |
| Understanding context  | meaningful to them                                  |   |  |
| <ul> <li>Conduct user-centred research to understand</li> </ul>        | Defining: setting parameters                        | <ul> <li>role and functions of key equipment.</li> </ul>      | key equipment: icing bags, piping tips, baking     |
| design opportunities and barriers                                      | Boundaries: limiting factors, such as available     |   | pans, cake knives and spatulas, cookie cutters,    |
|  | technology, expense, environmental impact,          |   | candy and chocolate molds.                         |
| Defining   | issues of appropriation, and knowledge that is      |   |  |
| <ul> <li>Choose a design opportunity and point of view</li> </ul>      | considered sacred                                   |   | ingredients: food colourings and flavourings,      |
| <ul> <li>Identify potential users, intended impact, and</li> </ul>     | Ideating: forming ideas or concepts                 |   | varieties and qualities of white, milk and dark    |
| possible unintended negative consequences                              | Designing with users: working with users at all     | a few simple <b>ingredients</b> can make a wide               | chocolate, sugars, flours, jams, jellies, fats and |
| <ul> <li>Make inferences about premises and</li> </ul>                 | stages of the design process                        | variety of cake and pastry products                           | eggs   |
| boundaries that define the design space                                | • Sources of inspiration: may include experiences;  |   |  |
|  | traditional cultural knowledge and approaches,      |   | variety: puff, choux, short-crust and sweet pastry |
| Ideating   | including those of First Peoples; places, including |   | products; pound, layer, mousse cakes               |
| <ul> <li>Take creative risks to identify gaps to explore as</li> </ul> | the land and its natural resources and analogous    |   |  |
| design space   | settings; and people, including users, experts, and |   | decoration: fondant, gum paste, butter cream,      |
| <ul> <li>Generate ideas to create a range of possibilities</li> </ul>  | thought leaders                                     | <ul> <li>history and ideas behind the elements and</li> </ul> | royal icing and garnishing for special occasions,  |
| and add to others' ideas in ways that                                  | • Information: for example, other people as         | application of artistic design and                            | cultural and ethnic significant designs            |
| create additional possibilities  | experts (e.g., First Peoples Elders), secondary     | decoration techniques   |  |

- Critically analyze how competing social, ethical, and sustainability considerations impact designed solutions to meet global needs for preferred futures
- Prioritize ideas for prototyping and designing with users

### **Prototyping**

- Identify and use a variety of sources of inspiration and information
- Choose an appropriate form, scale, and level of detail for prototyping, and plan procedures for prototyping multiple ideas
- Analyze the design for life cycle
- Construct prototypes, making changes to tools, materials, and procedures as needed
- Record iterations of prototyping

## **Testing**

- Identify feedback most needed and possible sources of that feedback
- Develop an appropriate test of the prototype
- Gather feedback from users over time to critically evaluate their design and make changes to product design or processes
- Iterate the prototype or abandon the design idea

## **Making**

- Identify appropriate tools, technologies, materials, processes, potential funding sources, and time needed for production, and where/how these could be available
- Use project management processes when working individually or collaboratively to coordinate production

## **Sharing**

• Share their progress while making to increase

sources, collective pools of knowledge in communities,

collaborative atmospheres

- **Design for life cycle**: including the social and environmental impacts of extraction and transportation of raw materials, manufacturing, packaging,
- transportation to markets, servicing or providing replacement parts, expected usable lifetime, and reuse or recycling of component materials
- **Iterations**: repetitions of a process with the aim of approaching a desired result
- Sources of that feedback: may include peers; users; keepers of traditional cultural knowledge and approaches, including those of First Peoples; and other experts
- Appropriate test: includes evaluating the degree of authenticity required for the setting of the test, deciding on an appropriate type and number of trials, and collecting and compiling data
- Potential funding sources: It is not the intent, and not appropriate, for students to have to raise funds in order to complete their school project. Students may, however, wish to investigate sources of funding for the commercial development of their products.
- **Share**: may include showing to others, use by others, giving away, or marketing and selling
- **Product**: for example, a physical product, a process, a system, a service, or a designed environment
- **Technologies**: things that extend human capabilities
- Food safety and food production: packaging, farming regulations, retail operations, date labelling
- Food philosophy: approach to the way food is used and consumed
- Group: for example, organization, family, school

- classifications of cookies
- procedures in relation to sugar and its function in baking and candy creation
- procedures in chocolate making
- First Peoples uses and connections to diverse food sources, ways of harvesting and preparation
- Social, ethical, sustainability of ingredient choices in preparing baked goods

**procedures and function**: Candies by taking sugar mixture through the syrup stages. Hand make chocolates after tempering and flavouring

| feedback, collaboration, and, if applicable, marketing  Decide on how and with whom to share or promote their product, creativity, and, if applicable, intellectual property Critically evaluate their design thinking and processes, and their ability to work effectively both as individuals and collaboratively in a group, including the ability to implement project management processes Identify new design issues, including how they or others might build on their concept  Applied Skills Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments Identify new devaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies Explore existing, new, and emerging tools, technologies, and systems and evaluate their skills and skill the skills and skill the skills and skill the skills and skill levels, in relation to their project or design interests  Applied Technologies Explore existing, new, and emerging tools, technologies, and systems and evaluate their skills over time  Applied Technologies as the first project or design interests |   |   | , |  |
|---|---|---|---|--|
| Decide on how and with whom to share or promote their product, creativity, and, if applicable, intellectual property Critically evaluate their design thinking and processes, and their ability to work effectively both as individuals and collaboratively in a group, including the ability to implement project management processes eledentify new design issues, including how they or others might build on their concept  Applied Skills Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments In relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests   |   |   |   |  |
| promote their product, creativity, and, if applicable, intellectual property  • Critically evaluate their design thinking and processes, and their ability to work effectively both as individuals and collaboratively in a group, including the ability to implement project management processes  • Identify new design issues, including how they or others might build on their concept  Applied Skills  • Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments  • Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies  • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests   |   |   |   |  |
| applicable, intellectual property   | <ul> <li>Decide on how and with whom to share or</li> </ul> | - , ,                                   |   |  |
| Critically evaluate their design thinking and processes, and their ability to work effectively both as individuals and collaboratively in a group, including the ability to implement project management processes  Identify new design issues, including how they or others might build on their concept  Applied Skills  Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments  Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies  Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests   |   | , |   |  |
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| collaboratively in a group, including the ability to implement project management processes  • Identify new design issues, including how they or others might build on their concept  Applied Skills  • Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments  • Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies  • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  |   |   |   |  |
| implement project management processes  • Identify new design issues, including how they or others might build on their concept  Applied Skills  • Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments  • Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies  • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests   |   |   |   |  |
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| or others might build on their concept  Applied Skills  Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments  Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies  Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  |   |   |   |  |
| Applied Skills  • Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments  • Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies  • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  |   |   |   |  |
| Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments     Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies     Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  | or others might build on their concept                      |   |   |  |
| Demonstrate an awareness of safety issues for themselves, co-workers, and users in both physical and digital environments     Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies     Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  |   |   |   |  |
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| physical and digital environments  • Identify and evaluate their skills and skill levels, in relation to their project or design interests, and develop specific plans to learn or refine their skills over time  Applied Technologies  • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  | •   |   |   |  |
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| and develop specific plans to learn or refine their skills over time  Applied Technologies  • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  | ,   |   |   |  |
| learn or refine their skills over time  Applied Technologies  • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  |   |   |   |  |
| Applied Technologies  • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  | · · ·   |   |   |  |
| • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  | learn or refine their skills over time                      |   |   |  |
| • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for their design interests  | Applied Technologies  |   |   |  |
| technologies, and systems and evaluate their suitability for their design interests   |   |   |   |  |
| suitability for their design interests  |   |   |   |  |
|   |   |   |   |  |
| Analyze the role and impact of technologies in  | ,   |   |   |  |
| societal change, and the personal, social, and  | ,   |   |   |  |
| environmental impacts,  |   |   |   |  |
| including unintended negative consequences, of  |   |   |   |  |
| their choices of technology use   |   |   |   |  |
| Analyze how cultural beliefs, values, and ethical   | <u> </u>  |   |   |  |
| positions affect the development and use of   | positions affect the development and use of                 |   |   |  |
| technologies  | technologies  |   |   |  |