# PIPER HIGH SCHOOL

2023 2024

# CAPSTONE HANDBOOK

# PIPER HIGH SCHOOL TABLE OF CONTENTS

## Overview

Overview	1
Academy Timeline	2
Capstone Timeline	2

## Curriculum

Design Thinking				
Mentorship, Reflection, and				
Employability Skills	5			
Research Paper				
Senior Capstone Experience				
Digital Portfolio				
Capstone Presentation	12			

## Resources

Staff Directory..... 13

# PIPER HIGH SCHOOL CAPSTONE HANDBOOK

Demonstrate industry relevant competencies to showcase how you are Future Ready

The Senior Capstone Experience at Piper High School is twofold, both of which are rooted in the design thinking process and are constructed to create authentic real world experiences for students. The first component is a connection with real world industry partners. Students engage with working professionals via client connected Senior Capstone Experience projects, internships, and entrepreneurial experiences. It is the 'experience' portion of the Senior Capstone Experience. The second component is a culminating public presentation of their experience that incorporates key artifacts that document the student's research and progress towards attaining a Market Value Asset. The Capstone will have students work within their Academy Capstone course to utilize design thinking to engage with the prompt "how might we..." The requirements of each Senior Capstone Experience will depend on how the students decide to craft their solutions.

Arts & Media





Human Services



Public Service



Health & Life Sciences



Business, Entrepreneurship, & Innovation



Design, Production, & Aviation



## REAL WORLD

# ACADEMY

## INSPIRE

#### PIPER PRAIRIE AND PIPER CREEK ELEMENTARY

At the elementary level, we focus on INSPIRING our students with interactive career awareness activities and #FutureReady projects. Each of these awareness activities includes our Portrait of a Piper Graduate Competencies and direct connections to industry partners.

## IGNITE

#### **PIPER MIDDLE SCHOOL**

At the middle level, we work to IGNITE our student's individual passions and begin linking those directly to careers of interest. The Academy exploration courses help students deepen their understanding of the workforce. The 8th Grade year culminates in students electing an Academy which provides a lens to direct their studies at the High School

## THE CAPSTONE

#### **FALL SEMESTER**

	Unit Title	Description	Estimated Key Dates
Unit	Design Thinking Sprint	This unit will focus on learning key vocabulary and concepts necessary for Design Thinking	Present - August 31
Unit 2	Design Thinking 101: Artifical Intelligence	The 101 unit allows students, in small groups, to explore current issues within their field while growing comfort with the Design Thinking process	Present - September 26
Unit 3	Design Thinking 102: Training and Education	Unit 102 focuses on the training necessary for success in identified fields. The launch portion includes visits to potential future programs	Present - October 26 Program visit- October 31
Unit 4	Research Paper	The semester culminates in creating a multigenre career research paper that shows	Round-Table Interviews- November 14 Paper due - December 10
PAGE 2		fundamental understandings of identified fields	Infographic due- course final

## LEARNING

# TIMELINES



## IMMERSE

#### **PIPER HIGH SCHOOL**

Piper High School works to ensure that its graduates are future-ready for their postsecondary pursuits through the implementation of six academies which house twentyfour different sectors. These sectors provide a clear course of study that ties closely to the Kansas State Department of Education's Career and Technical Education pathways. The Academy experience culminates in a year-long Capstone course that allows students to showcase their work and create idustry-specific experiences that reflect their unique learning.

## COURSE TIMELINE

#### **SPRING SEMESTER**

Unit Title

Unit Digital Portfolio Creation Unit Capstone Presentation

#### Description

Third quarter unit differentiates each student's work based on their field and desired outcomes. Students will select either an internship, a client-connected project, or an entrepreneurial experience.

Kansas's Individual Plan of Study mandate requires each student creates a careerfocused digital portfolio. This portion of the course focuses on creating that work.

Seniors present their Senior Capstone Experience in a 20 minute presentation given to a board of staff and industry professionals. Estimated Key Dates

These dates vary based on each student's selected project. See the larger descriptions for more information. All work will be posted in Canvas. Portfolio due - April 28

Senior Capstone Experience Presentation Day - May 10

PAGE 3

# FALL 2023 DESIGN THINKING

The first quarter of the course is spent exploring the Design Thinking Process, which is a framework for problem solving designed to address complex industry issues with nuanced and well-researched solutions. Students will engage with multiple rounds of Design Thinking, each created to expand student experiences with the process. The Design Thinking Process is the framework students will utilize if they elect to conduct a Client Connected Project for their industry connected Senior Capstone Experience.



#### **UNIT OVERVIEW**

Each unit will contain assignments correlated to every phase of the Design Thinking Framework. These assignments will start as group assignments that are assessed through participation and move towards individual assignments that recieve robust feedback.

#### **UNIT ASSESSMENTS**

Each unit of Design Thinking will culminate with a pitch of some kind, usually in the form of a presentation. Presentations will be graded via a rubric which will be made available to students through Canvas prior to the due date.

## **DESIGN THINKING FRAMEWORK**

# Step Five: Launch Step Cu: Can this idea really happen; Image: Comparison of the step of th

What would that look like? How would that work?

#### **Step One: Frame and Focus**

How might we \_\_\_? How can I come up with a useful & novel idea that will solve this?

## Step Two: Empathize and Define

What is the problem the user is experiencing? How do you know?

Adapted from Startland, 2022

# SUPPLEMENTAL SUPPORTS THROUGHOUT THE YEAR

## WHY ARE ADDITIONAL SUPPORTS NEEDED?

This highly differentiated work requires many different kinds of student support. Students develop a network of adult contacts to help them at every step of the project, and that can connect them with future opportunities.

## **MENTORSHIP**

Students will provide a list of potential mentors at the beginning of the fall semester. Students will meet with their mentor once a month to discuss assigned topics and to get feedback on key pieces of work. Faculty mentors provide a knowledgable outside perspective on student work, as well as meaningful inights into the student's progress on the project as a whole.

## REFLECTIONS

Students will reflect on their growth and process each month. Students will be expected to craft a minimum of five sentences addressing specific prompts that guide students through thoughtful examination of their learning. This work will create a timeline of reflections that can be utilized in the creation of their digital portfolio.



## **EMPLOYABILITY SKILLS**

After completing employability skills assessments, all students will complete mini-units focused on employability skills like interviewing, networking, and the creation of an industry-specific resume. Students will utilize in-person and online resources to gain relevant feedback on their progress. Some students will additionally complete work that supports their projects and/or internships based on their demonstrated skills and the feedback from our industry partners.

# FALL 2023 MULTIGENRE CAREER

The State of Kansas, as a part of the Individual Plan of Study, requires every student to complete a career research paper. Each student will research and write a multigenre paper about their selected career as part of their Capstone Experience. Α multigenre paper asks students to write in multiple different modes to explore different facets of their identified career. The paper serves as an empathy-gathering step for \_ all future project development.

## **PAPER OVERVIEW**



The research paper will utilize either MLA or APA (depending appropriate formatting for the selected field). The paper will be broken into five sections:

- 1.A Letter to the Reader (narrative)
- 2.Career Research (expository)
- 3.Current Issue in the field (persuasive)
- 4.Synthesis (reflective)
- 5. Annotated Works Cited

The utilization of these five sections enables students to utilize their media literacy skills, and analyze rich rhetorical situations, and the multiple perspectives that are inherent in any industry.

#### LETTER TO THE READER

This one page section introduces the project and tells the story of why the author is interested in their selected industry. This portion provides a human lens through which to view the project.

#### **CAREER RESEARCH**

The three to four page research section is the bulk of the project. This section explores areas like required education/training, job responsibilities, average salaries, types of work environments, and potential career outlooks. The research portion demonstrates in-depth practical understandings of the industry students have chosen to study.

#### **CURRENT ISSUES IN THE FIELD**

The persuasive section asks students to identify a key current issue happening wihtin their selected field and to take a position on the issue in a two to three page analysis. The purpose of this section is to stablish student's crtical thinking and understanding of the industry as a whole.

#### SYNTHESIS

Students conclude the project with a one page reflection on their key learnings from the project as a whole. Students will be asked to explain which pieces of their research they find the most persuasvie and to make the argument for their future plans.

#### **ANNOTATED WORKS CITED**

Students will correctly cite five to eight print or digital resources used within their project and defend their use of those sources.

# **RESEARCH PAPER**

## **PROPOSED RUBRIC**

410 points (41% of the total semester grade) Specific details and requirements for each category will be provided in Canvas

- Letter to the Reader (70 points) Organization (10 points) Content (35 points) Writing conventions (10 points) Sentence fluency (10 points) Word choice (5 points)
- Career Research (110 points) Organization (10 points) Content (50 points) Internal citations (25 points) Writing conventions (10 points) Sentence fluency (10 points) Word choice (5 points)

**Current Issues** (110 points) Organization (10 points) Content (50 points) Internal citations (25 points) Writing conventions (10 points) Sentence fluency (10 points) Word choice (5 points)

Synthesis (70 points) Organization (10 points) Content (35 points) Writing conventions (10 points) Sentence fluency (10 points) Word choice (5 points)

Annotated Works Cited (50 points) Citation of sources (4 points per entry) Defense paragraph (6 points per entry)

## **PROPOSED TIMELINE**

Project roll out and resource exploration

Research section direct (

Research time and Round Table Interview prep

nd Nov. ep 7 nd Nov.

9

Nov. 14

Nov.

16

Nov.

3

nd Table Interview prep

Research time and Round Table Interview prep

> Research time and Round Table Interview

Research section formal check-in English instructor coaching sessions



10

Persuasive section direct instruction

Synthesis direct instruction and Persuasive section formal check-in

Bibliography direct instruction and Synthesis section formal check-in

Bibliography and Letter to the Reader formal check-in

Peer feedback

The entire project is due through Canvas by 11:59 pm on December 10





# **PIPER HIGH SCHOOL**

## TYPES OF CAPSTONE EXPERIENCES

The world of work is changing in meaningful ways. The era where a diploma, college degree or a solid recommendation was enough to get a job is over. Employers want entry level workers to demonstrate key competencies required to do their work. There is no better way to show those abilities than through experience. Additionally, students need hands-on experiences to make informed decisions about what career areas they'd like to pursue. The Capstone Experience will provide this opportunity. In the final presentation, students will display their collective educational experiences and competencies in a defense of how they are Future Ready.

The Senior Capstone Experience is a highly individualized and multi-faceted project. The experience should be an active/interactive endeavor not a passive practice. Each experience will demonstrate mastery of the core competencies in their own way. With that said, however, each experience will be expected to:

- · Engage in the design thinking process
- · Gain experience with industry professionals
- Develop a digital portfolio
- Present and defend their achievement of the
  Portrait of a Graduate Competencies

## Internship

Learners perform meaningful job tasks at a worksite or approved location, under the guidance of a qualified supervisor. Performance is evaluated by the work manager in addition to an educator.

## **Client Connected Project**

Learners analyze and solve authentic problems, working in collaboration with other learners and professionals from industry, not-for-profit, civic or community-based organizations. Work involves authentic methods and tools used by professionals in the work environment. Experience includes mentoring and evaluation by working professionals. Output is viewed as value-added by external stakeholders and resume-worthy.

## **Entrepreneurial Experience**

Students identify a compelling social or market problem and mobilize resources to research and solve it. Leveraging input and support from multiple stakeholders, students frame, research, analyze, prototype, implement, reflect, and adapt potential solutions. Outputs of MVA-level entrepreneurial experiences include a stakeholder research summary, a "business plan", and feedback from relevant external stakeholders

# **CAPSTONE EXPERIENCE**

## SAMPLE CAPSTONE ASSIGNMENTS

## **INTERNSHIP**

Internship Pre-Assessment Mid-Internship Feedback and potential remediation assignments Post-Internship Evaluation Consistent and repeated industry-driven work, which can be completed on or off site Class hours can be traded to balance out-of-class hours

## CLIENT-CONNECTED PROJECT

Question analysis, Research portfolio, Soft pitch with industry-partner feedback, Project timeline, Project implementation, Formal industry-partner presentation. Roughly 24 hours of project-connected work with a minimum of 4 hours of client contact. Class hours can be traded to balance out-of-class hours if needed

## ENTREPRENEURIAL EXPERIENCE

Market research to identify desired products and or services Daily assignments that build to a completed business plan Mid-project industry-partner feedback Formal pitches to multiple industry-partners

# **DIGITAL PORTFOLIO**



## **PORTFOLIO OVERVIEW**

Kansas's Individual Plan of Study mandate also requires that students create a digital portfoilio of their college and career readiness work. Piper High School meets this requirement by having students create a website or other industry appropriate container to showcase all of their content, as it relates to their Academy, future plans, and their Senior Capstone Experience. The Portfolio is used as the student's visual aid for their Senior Capstone Experience Presentation.

## SECTIONS

Biography or "About me"

Research

**Process or Journals** 

Experience

Network

Unique artifacts



class periods of direct instruction and work time for students to build a website through Wix.com. Students may request to use a different industry specific platform for their portfolio.

# **DIGITAL PORTFOLIO**

## **PROPOSED RUBRIC**

190 points (19% of the total semester grade) Specific details and requirements for each category will be provided in Canvas

#### Home Page (30 points)

Intentional aesthetic (3 points) Writing conventions(7 points) Assigned content (11 points) Elected content (9 points)

#### **Research Page** (40 points)

Intentional aesthetic (3 points) Writing conventions (7 points) Research paper infographic (10 points) Roundtable interview summary (10 points) Individual interview summary (10 points)

#### Process Page (40 points)

Intentional aesthetic (3 points) Writing conventions(7 points) A minimum of three pieces of content reflecting on the student's journey through their experience (30 points)

#### **Project Page** (50 points)

Intentional aesthetic (3 points) Writing conventions (7 points) Explanation of the experience (20 points) Artifacts (20 points)

#### Wow Factor (30 points)

The website/presentation sufficiently uses or plans for the usage of elements that set it apart from other presentations.

#### April 2 Project roll out and create basic Apri 18 **Project Page** framework for the portfolio April 4 April 23 Planning your "wow factor" "About Me: or Landing Page **Research Page** April 25 April 9 Project Page and "wow factor" check in and "About Me" check in April 11 April 26 Peer editing and feedback Research Page check in April 26 April 12 **Process Page** Digital Portfolio due by 11:59 April 16 Process Page check in

## **PROPOSED TIMELINE**

# SENIOR CAPSTONE PRESENTATION DAY

## FRIDAY, MAY 10, 2024

## **PRESENTATION OVERVIEW**

Students will present a 20 minute review of the experiences they have gained through their Academy work and in their Senior Capstone Experience to a board of industry partners and community stake holders.. Students utilize their digital portfoilio as a visual aid to support their work. Additionally, they plan a "wow factor" that showcases their unique and individul application of their experiences. Each presentation is concluded with a 5 minute question and answer period where students defend their thinking.





## "WOW FACTORS"

Each student is required to plan implement a unique element of their presentation. This may take the form of additional portfolio content, live demonstrations of the skills the student has gained, or other components or artifacts that demonstrate the student's engagement with their learning experiences.

# 2023-2024 ACADEMY STAFF

















## POLLY VADER

Director or Real World Learning polly.vader@piperschools.us (913)721-2100 ext. 6263

## **ROBERT CAVE**

PHS Academy Facilitator robert.cave@piperschools.us (913)721-2100 ext. 6206

## **TORI DENEAULT**

Teacher Leader- Arts & Media tori.deneault@piperschools.us (913)721-2100 ext. 6214

## **KYLE KOHLER**

Teacher Leader- Business, Entrepreneurishp, & Innovation kyle.kohler@piperschools.us (913)721-2100 ext. 6130

## **STEPHAN BRUMBAUGH**

Teacher Leader- Design, Production, & Aviation stephan.brumbaugh@piperschools.us (913)721-2100 ext. 6279

## **GEILA DODIN**

Teacher Leader- Health & Life Sciences gelia.dodin@piperschools.us (913)721-2100 ext. 6337

## TRACY GAY

Teacher Leader- Human Services tracy.gay@piperschools.us (913)721-2100 ext. 6310

## **CLAIRE HAFLICH-HAZEL**

Teacher Leader- Public Service claire.haflich@piperschools.us (913)721-2100 ext. 6137





1

## **Piper High School**

4400 N. 107th Street Kansas City, Kansas 66109