



Petersburg High School

109 Charles W. St.
P. O. Box 289
Petersburg, Alaska 99833-0289

Brad King
Principal
877-526-7656

Proposed Elective Course

Course Title: Understanding AI: Its History and Evolution, Ethical Considerations, and the Future of Work

Instructor: Rebecca Shatwell

Course Category: Elective

Duration: Two 18-week semesters

Grade Level: 9-12

Course Description: This non-technical course invites students to explore the transformative world of Artificial Intelligence through a sociological and ethical lens. Rather than focusing on coding, we delve into the "why" and "should" of technology. Students will trace the historical evolution of machine learning, analyze the mathematical logic behind neural networks in plain English, and debate the profound ethical implications of AI in modern society. From algorithmic bias and digital privacy to the future of the workforce and human creativity, this course equips students with the critical thinking skills necessary to lead in an AI-driven world.

Course Syllabus: Semester 1

Quarter 1: Foundations & History (Weeks 1-9)

- Weeks 1-2: Introduction to AI: Definitions, Myths, and "The Turing Test."
- Weeks 3-5: A Brief History: From early logic machines to the "AI Winters."
- Weeks 6-7: How Machines "Learn": A conceptual guide to Supervised and Unsupervised learning.
- Weeks 8-9: The Big Data Era: Where data comes from and who owns it.

Quarter 2: The Mechanics of Intelligence (Weeks 10-18)

- Weeks 10-12: Natural Language: How Large Language Models (LLMs) talk back.
- Weeks 13-15: Machine Vision: From facial recognition to autonomous vehicles.
- Weeks 16-17: Generative AI: The rise of synthetic media (images, music, and deepfakes).
- Week 18: Mid-term Project: The Evolution of an Algorithm (A case study on a specific AI application).

Course Syllabus: Semester 2

Quarter 3: Ethics, Integrity, and Society (Weeks 19-27)

- Weeks 19-21: Algorithmic Bias: How AI can inherit and amplify prejudices and preconceptions.
- Weeks 22-23: Privacy and Surveillance: Life in the age of constant data collection.
- Weeks 24-25: The Future of Work: Automation, Income, and new careers.
- Weeks 26-27: AI and Art: Copyright, creativity, and the definition of an "author."

Quarter 4: AI in Action & Capstone (Weeks 28-36)

- Weeks 28-29: AI for Social Good: Addressing environmental and medical mysteries.
- Weeks 30-31: Law and Policy: Understanding global AI regulations (i.e. EU AI Act).
- Weeks 32-35: Capstone Project: Designing an AI solution for a community problem.
- Week 36: Final Presentations and Future Reflections.