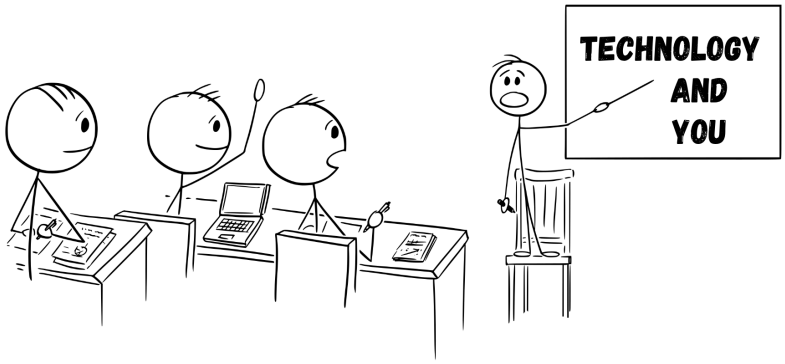
PROPOSED COURSE OUTLINE FOR THE HIGH SCHOOL LEVEL



Potential names for the course:

Digital Connections: Exploring Tech, Society, and Self
Navigating the Technological World
Digital Studies
Tech and Humanity

TECH AND HUMANITY: EXPLORING TECH, SOCIETY, AND SELF

Course Overview

The course will help students to better understand the digital world by examining the sociological and psychological impacts of technology, offering students a deeper understanding of how it shapes human behaviour and social interactions. The course will also provide a practical introduction to understanding app development and the attention economy, inspiring students to think creatively and critically about the digital tools they use daily. By examining the effects of technology on brain development and mastering self-regulation strategies, students will have an understanding of themselves and be better equipped to maintain their digital well-being.

Why Students Should Take This Course (Blurb)

In today's world, technology is everywhere, and it affects nearly every part of our lives. *Tech and Humanity: Exploring Tech, Society, and Self*, will help you understand how technology like your smartphone shapes your behaviour, relationships, and even your brain! You'll learn how to use social media responsibly, spot fake news, and keep your digital life healthy. Plus, you'll get hands-on experience with cool new tech like AI and app development. By the end of the course, you'll be better equipped to navigate the digital world, make smart choices, and even create your own digital content.

CURRICULAR OUTCOMES

Understanding Technology and Society: Demonstrate an understanding of the historical and current impacts of technology on society. Explore the relationship between technology and socioeconomic factors.

Digital Literacy: Develop skills to critically evaluate digital content for accuracy, credibility, and bias. Apply effective strategies for managing and organizing digital information.

Technology and Personal Well-being: Identify the psychological effects of technology on personal well-being. Implement strategies for maintaining a healthy balance between technology use and personal life.

Ethical Use of Technology: Recognize ethical considerations related to technology use, including privacy, security, and digital citizenship. Evaluate the implications of technology on individual rights and freedoms.

Emerging Technologies: Explore emerging technologies such as virtual reality, augmented reality, and artificial intelligence. Assess the potential impacts of emerging technologies on society and individual lives.

BIG IDEAS for Tech and Humanity: Exploring Tech, Society, and Self

1. **Understanding Technology's Impact Enhances Awareness:** Recognizing how technology shapes human behaviour, relationships, and society allows us to navigate the digital world responsibly and effectively.
2. **Critical Thinking and Media Literacy Are Vital in the Information Age:** Developing skills to evaluate digital content critically and discern credible sources from misinformation empowers us to make informed decisions online.
3. **Digital Citizenship and Ethics Foster a Positive Online Community:** Practicing ethical behaviour and responsible digital citizenship promotes a healthier, more respectful, and inclusive online environment.
4. **Balancing Digital Use Supports Personal Well-being:** Implementing self-regulation strategies and mindfulness in technology use helps maintain mental and emotional health in a digitally connected world.
5. **Emerging Technologies Present Opportunities and Challenges:** Exploring and understanding the implications of emerging technologies prepares us for future advancements and their potential societal impacts.

UNIT OVERVIEW

Unit 1: Introduction to Navigating a Technological World
Unit 2: Social Media and Online Communication
Unit 3: Digital Citizenship and Ethics
Unit 4: Media Literacy and Fake News
Unit 5: Generative Artificial Intelligence
Unit 6: Sociology of Technology and Social Networks
Unit 7: Psychology of Technology and Self-Understanding
Unit 8: The Developing Brain and Impacts of Technology
Unit 9: Digital Well-Being and Self-Regulation
Unit 10: App Development and the Attention Economy
Unit 11: Advancing Technology and the Future

UNIT OVERVIEW

Unit 1: Introduction to Navigating a Technological World

Introduce students to the foundational concepts and trends shaping the modern technological landscape, fostering a broad understanding of technology's role in society. Educate students about potential online risks and threats, empowering them with strategies to stay safe, secure, and responsible in their online activities.

Curricular Competencies:

- **Critical Thinking:** Analyze and critique the role of technology in modern society.
- **Personal Awareness and Responsibility:** Understand and apply strategies for safe, secure, and responsible online activities.
- **Communication:** Articulate the trends shaping the technological landscape.

Why this Unit is Important: Understanding how technology influences our daily lives helps us navigate the digital world safely and responsibly. Knowing the potential risks and threats online empowers us to protect ourselves and make informed decisions.

Unit 2: Social Media and Online Communication

Explore the impact of social media on communication, relationships, and society, while fostering critical thinking and digital citizenship skills in online interactions.

Curricular Competencies:

- **Digital Literacy:** Evaluate the impact of social media on communication and relationships.
- **Social Responsibility:** Demonstrate respectful and appropriate behavior in online interactions.
- **Critical Thinking:** Analyze the societal impacts of social media.

Why this Unit is Important: Social media shapes how we interact and form relationships. By critically examining its effects, we can use it more thoughtfully and maintain healthier online interactions.

Unit 3: Digital Citizenship and Ethics

Foster an understanding of ethical and responsible behaviour in the digital world, emphasizing the importance of digital citizenship and contributing positively to online communities. Explore how corporations approach these topics.

Curricular Competencies:

- **Ethical Understanding:** Identify and practice ethical behaviour in digital spaces.
- **Social Responsibility:** Contribute positively to online communities.
- **Critical Thinking:** Analyze corporate approaches to digital citizenship and ethics.

Why this Lesson is Important: Being a good digital citizen means understanding and practicing ethical behaviour online. This lesson helps us contribute positively to digital communities and understand corporate responsibilities.

Unit 4: Media Literacy and Fake News

Develop students' critical thinking and media literacy skills to discern credible sources from misinformation, equipping them to navigate the complex media landscape with discernment and skepticism.

Curricular Competencies:

- **Critical Thinking:** Evaluate the credibility of digital content.
- **Digital Literacy:** Identify misinformation and fake news.
- **Communication:** Develop strategies to discern credible sources.

Why this Lesson is Important: With so much information online, it's crucial to know how to identify what's true and what's not, as well as the motivations behind the posts. This lesson teaches us to be critical thinkers and responsible consumers of information.

Unit 5: Generative Artificial Intelligence

Introduce students to the concepts and applications of generative AI tools like Chat GPT, sparking curiosity and understanding of these transformative technologies. Discuss themes related to responsible uses of these technologies and their impacts on personal development and learning. Explore the creative potential of generative AI technologies through inquiry, inspiring students to harness AI tools for artistic and individual expression.

Curricular Competencies:

- **Innovation and Technology:** Explore and utilize generative AI tools.
- **Critical Thinking:** Assess the ethical implications of AI use.
- **Creativity:** Harness AI for artistic and individual expression.

Why this Lesson is Important: AI is transforming the world. Understanding and using these tools responsibly can enhance our creativity and prepare us for future technological advancements.

Unit 6: Sociology of Technology and Social Networks

Examine the social and cultural implications of technological advancements, fostering critical reflection on technology's impact, particularly social networking sites like Instagram and Snapchat, on society and human behaviour. How do algorithms work? Why are algorithms used?

Curricular Competencies:

- **Critical Thinking:** Analyze the social and cultural implications of technology.
- **Social Responsibility:** Understand the impact of algorithms on human behaviour.
- **Communication:** Explain why algorithms are used in social networking sites.

Why this Lesson is Important: Technology deeply influences society. By understanding these effects, we can critically engage with social networks and recognize their broader societal impacts.

Unit 7: Psychology of Technology and Self-Understanding

Deepen students' self-awareness and understanding of the psychological effects of technology and social media use on themselves and others.

Curricular Competencies:

- **Personal Awareness:** Reflect on the psychological effects of technology.
- **Critical Thinking:** Analyze how social media impacts self and others.
- **Communication:** Articulate personal experiences with technology use.

Why this Lesson is Important: Technology affects our mental health. Understanding these effects helps us develop better self-awareness and manage our technology use more effectively.

Unit 8: The Developing Brain and Impacts of Technology

Investigate the intersection of neuroscience and technology, exploring how technology and social networking sites influence brain development and cognition in adolescents.

Curricular Competencies:

- **Critical Thinking:** Examine the influence of technology on brain development.
- **Personal Awareness:** Reflect on the cognitive impacts of technology use.
- **Communication:** Discuss the intersection of neuroscience and technology.

Why this Lesson is Important: Our brains are still developing, and technology can have significant impacts. Learning about these effects can help us make healthier choices in our tech use.

Unit 9: Digital Well-Being and Self-Regulation

Promote strategies for maintaining balance and well-being in a digital world, empowering students to develop self-regulation skills and cultivate healthy relationships with and through technology.

Curricular Competencies:

- **Personal Awareness:** Develop strategies for maintaining digital well-being.
- **Self-Regulation:** Implement techniques for balancing technology use and personal life.
- **Critical Thinking:** Reflect on the relationship between technology and well-being.

Why this Lesson is Important: Maintaining a healthy balance with technology is essential for our well-being. This lesson teaches us self-regulation strategies to keep our digital lives in check.

Unit 10: App Development and the Attention Economy

Inspire students to explore the world of app development and understand the attention economy, fostering creativity, critical thinking, and ethical considerations in designing digital experiences.

Curricular Competencies:

- **Innovation and Technology:** Explore app development processes.
- **Critical Thinking:** Analyze the attention economy and its implications.
- **Creativity:** Design digital experiences with ethical considerations.

Why this Lesson is Important: Understanding how apps are developed and how they capture our attention can inspire us to create better digital experiences and be more critical of the apps we use.

Unit 11: Advancing Technology and the Future

Explore emerging technologies such as virtual reality (VR), augmented reality (AR), and other cutting-edge innovations, examining their potential to transform various industries and everyday life. Students will examine future possibilities of advancing tech and the societal, ethical, and practical implications of their widespread adoption.

Curricular Competencies:

- **Innovation and Technology:** Explore emerging technologies and their applications.
- **Critical Thinking:** Assess the societal and ethical implications of new technologies.
- **Communication:** Discuss future possibilities and challenges of advancing tech.

Why this Lesson is Important: Emerging technologies are shaping our future. By understanding their potential and challenges, we can better prepare for and contribute to a rapidly evolving world.

Possible Activities for Tech and Humanity: Exploring Tech, Society, and Self

1. **Social Media Impact Diary**
    - **Description:** Students keep a diary of their social media use for a week, reflecting on how it affects their mood, productivity, and relationships.
2. **Fake News Detective**
    - **Description:** In groups, students analyze various news articles to identify signs of credibility or misinformation, then present their findings.
3. **App Design Project**
    - **Description:** Students design a basic app prototype addressing a specific need or problem, considering user experience, addictiveness, and ethical implications.
4. **Debate on Digital Ethics**
    - **Description:** Students engage in structured debates on topics like data privacy, AI ethics, generative AI use in school, and the impact of social media algorithms.
5. **Tech-Free Challenge**
    - **Description:** Students take a 24-hour break from all digital devices and write a reflection on their experiences and insights.
6. **Generative AI Art Exhibition**
    - **Description:** Students use AI tools to create digital art pieces, which are then showcased in a virtual or physical gallery.
7. **Virtual Reality and the Future**
    - **Description:** Students explore various VR applications and write reports on potential future uses and societal impacts of VR technology.
8. **Algorithm Analysis**
    - **Description:** Students study the algorithms of popular social networks to understand how content is curated and its effects on user behaviour.
9. **Brain and Tech Presentation**
    - **Description:** Students research and present on how specific technologies affect adolescent brain development and cognitive functions.
10. **Attention Economy Analysis**
    - **Description:** Students analyze popular apps and games to understand how they capture and retain user attention, presenting their findings.
11. **Future Tech Scenario Planning**
    - **Description:** In groups, students develop scenarios for how emerging technologies might impact society in the next 10-20 years.
12. **Mindfulness and Technology Workshop**
    - **Description:** Guided activities focusing on mindfulness techniques to manage technology use and reduce digital stress. This could be student-led through mini-workshops.

Assessment Strategies for Tech and Humanity

1. **Formative Assessments**
    - Ongoing assessments to monitor student learning and provide feedback.
    - Examples: Quizzes, reflections, peer reviews, and class discussions.
2. **Summative Assessments**
    - Evaluations at the end of a unit or course to measure student learning.
    - Examples: Projects, presentations, essays, and exams.
3. **Self-Assessments**
    - Encourages students to reflect on their own learning and progress.
    - Examples: Journals, self-evaluation rubrics, and goal-setting activities.
4. **Peer Assessments**
    - Involves students in evaluating each other's work, promoting collaboration and critical thinking.
    - Examples: Peer reviews of projects or presentations, and group feedback sessions.
5. **Project-Based Assessments**
    - Assessments centred around complex tasks, often integrating multiple competencies.
    - Examples: Research projects, app development, digital campaigns.

Assessment Options

1. **Reflections and Journals**
    - **Option:** Students maintain a weekly journal reflecting on their technology use, social media interactions, and class learnings.
2. **Quizzes and Tests**
    - **Option:** Regular quizzes to test understanding of key concepts.
3. **Presentations**
    - **Option:** Students present their research or projects in small group shareouts.
4. **Projects**
    - **Option:** In-depth projects that allow students to explore a topic of interest.
5. **Essays and Research Papers**
    - **Option:** Written assignments that require critical analysis and synthesis of information.
6. **Peer Reviews**
    - **Option:** Structured sessions where students provide feedback on each other's work.
7. **Digital Campaigns**
    - **Option:** Creating campaigns to promote digital citizenship and ethical online behaviour.
8. **Self-Evaluation Rubrics**
    - **Option:** Students use rubrics to assess their own work and identify areas for improvement.

Suggested Resources

Documentaries

1. **The Social Dilemma** (2020)
    - Explores the dangerous human impact of social networking, with tech experts sounding the alarm on their own creations.
2. **Screened Out** (2020)
    - Examines how we can be more mindful and balanced in our relationship with technology.
3. **The Antisocial Network - Memes to Mayhem** (2024)
    - Explores how viral conspiracy theories can create real-world chaos.
4. **The Great Hack** (2019)
    - Investigates the Cambridge Analytica scandal and its impact on data privacy and democracy.
5. **Age of Influence - Series** (2024)
    - Explores social media and influencer culture.
6. **The Mind Explained - Series** (2021)
    - Different episodes explore and explain how the brain works regarding focus, memory, and brainwashing.
7. **Buy Now: The Shopping Conspiracy** (2024)
    - Dives into how consumer culture and buying habits are shaped by social media influence.

Movies

1. **The Circle** (2017)
    - A young woman joins a powerful tech company and uncovers the dark side of its social media-driven culture.
2. **Her** (2013)
    - A man develops a relationship with an AI operating system, exploring themes of love and technology.
3. **Ready Player One** (2018)
    - Set in a dystopian future, it explores the impact of virtual reality on society.

Books

1. **"The Shallows: What the Internet Is Doing to Our Brains" by Nicholas Carr**
    - Explores how the internet is changing the way we think, read, and remember.
2. **"Digital Minimalism: Choosing a Focused Life in a Noisy World" by Cal Newport**
    - Offers strategies for reducing digital clutter and focusing on what's truly important.
3. **"Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked" by Adam Alter**
    - Examines how technology companies design products to be addictive.
4. **"The Anxious Generation" by Jonathan Haidt**
    - Explores the rise of anxiety in children and teens because of smartphones and technology.
5. **"Alone Together: Why We Expect More from Technology and Less from Each Other" by Sherry Turkle**
    - Discusses how technology is shaping our social lives and personal relationships.

Student Competency Levels for Tech and Humanity

EMERGING

Description: Students at the Emerging level are beginning to understand basic concepts related to technology and its impacts on society and self. They show initial awareness of digital literacy, safety, and ethical considerations.

Knowledge and Understanding: Can identify basic technology trends and online risks.
Skills: Demonstrates limited ability to critically evaluate digital content and manage personal digital well-being.
Tech Behaviour: Requires guidance to participate responsibly in online communities and to use technology ethically.

DEVELOPING

Description: Students at the Developing level show growing competence in understanding and applying digital literacy concepts. They are becoming more confident in managing their digital presence and interactions.

Knowledge and Understanding: Understands the fundamental impacts of technology on communication, relationships, and brain development.
Skills: Can evaluate digital content with some accuracy and apply basic self-regulation strategies for digital well-being.
Tech Behaviour: Shows increased responsibility in online interactions and begins to recognize ethical considerations in technology use.

PROFICIENT

Description: Students at the Proficient level demonstrate a solid understanding of the digital landscape. They effectively apply critical thinking and digital literacy skills, showing responsibility and ethical behavior online.

Knowledge and Understanding: Can comprehensively explain the psychological, sociological, and ethical impacts of technology.
Skills: Evaluates digital content critically, designs ethical digital experiences, and effectively manages personal digital well-being.
Tech Behaviour: Consistently participates positively in online communities and demonstrates responsible digital citizenship.

EXTENDING

Description: Students at the Extending level exhibit advanced understanding and application of digital studies concepts. They are leaders in digital literacy and ethical technology use, often driving discussions and initiatives.

Knowledge and Understanding: Provides insightful analysis of complex technological trends and their long-term impacts on society and self.
Skills: Critically evaluates digital content with high accuracy, innovates in app development, and masters self-regulation strategies.
Tech Behaviour: Exemplifies ethical behaviour and digital citizenship, often mentoring peers and leading by example in promoting responsible technology use.

Glossary of Technology Terms for Course

App (Application): A software program designed to perform specific tasks or functions on a computer or mobile device.

Artificial Intelligence (AI): The simulation of human intelligence by computer systems, including learning, reasoning, and problem-solving capabilities.

Bias: Prejudice or favouritism towards a particular group, individual, or point of view, often influencing the presentation or interpretation of information.

Confirmation Bias: The tendency to seek out, interpret, and remember information that confirms one's pre-existing beliefs or biases, while ignoring or discounting contradictory evidence.

Cyberbullying: Bullying or harassment that takes place over digital devices or online platforms, including social media, email, or text messages.

Cybersecurity: Measures taken to protect computer systems and networks from unauthorized access, data breaches, and cyber-attacks.

Data Privacy: The protection of personal information and the right of individuals to control the collection and use of their data.

Digital Citizenship: The responsible and ethical use of technology, including respecting others' privacy, practicing online safety, and contributing positively to online communities.

Digital Detox: A period of time during which a person refrains from using digital devices or engaging in online activities.

Digital Divide: The gap between individuals or communities that have access to digital technologies and those that do not, often due to socioeconomic factors.

Digital Footprint: The trail of data left behind by a person's online activity, including social media posts, website visits, and online purchases.

Digital Literacy: The ability to access, understand, evaluate, and create digital content using various digital technologies and tools.

Digital Native: A person who has grown up using digital technology from a young age, often more comfortable and adept at using technology compared to digital immigrants.

Digital Well-Being: Maintaining a healthy balance and mindful use of technology to promote physical, mental, and emotional well-being.

Echo Chamber: A situation in which individuals are exposed only to information and opinions that reinforce their existing beliefs, leading to polarization and the amplification of extreme viewpoints.

Endless Scroll: A design feature used in websites and apps where content continuously loads as the user scrolls down the page, making it difficult to find a natural stopping point and often leading to prolonged usage.

Ethical Use of Technology: Using technology in a morally responsible manner, considering the impact on others and society as a whole.

Fake News: False or misleading information presented as news, often spread through social media or other online platforms.

Filter Bubble: The personalized online environment created by algorithms that selectively present information based on a user's past behaviour and preferences, potentially limiting exposure to diverse perspectives.

Generative AI: AI technology capable of generating new content, such as text, images, or music, based on input data or patterns.

Internet: A global network of interconnected computers and devices that communicate using standardized protocols.

Media Convergence: The merging of traditional media (e.g., print, television) with digital technologies (e.g., internet, social media) to create new forms of media content and communication.

Media Literacy: The ability to access, analyze, evaluate, and create media in various forms, including print, digital, and social media.

Online Communication: Communication conducted over the internet, including email, instant messaging, and video conferencing.

Operating System (OS): Software that manages computer hardware and provides common services for computer programs.

Privacy Settings: Controls and options provided by websites, apps, and devices to manage the privacy of personal information and online activities.

Search Engine: A web-based tool that allows users to search for information on the internet by entering keywords or phrases in a web browser.

Self-Regulation: The ability to control one's thoughts, emotions, and behaviours in order to achieve goals and maintain well-being, including regulating technology use.

Smartphone: A mobile phone with advanced features such as internet access, touchscreen interface, and various applications.

Social Construction of Technology: The theory that technology is shaped by social forces and constructed by societal values, norms, and institutions.

Social Media: Websites and applications that enable users to create and share content or participate in social networking.

Social Network: A digital platform that connects individuals or groups of people with shared interests or activities (e.g., Facebook, Instagram, Snapchat).

Streaks: A feature in social media and gaming apps where users are encouraged to maintain a consecutive daily activity streak, fostering habitual use and increasing engagement.

Technological Determinism: The theory that technology shapes society and culture, influencing social structures, behaviours, and values.

Technology: The application of scientific knowledge for practical purposes, especially in industry.

Variable Reinforcement: A psychological principle where rewards are given on an unpredictable schedule, making the behaviour more persistent, often used in technology and social media to keep users engaged.