**Social Implications of Technology Innovations: An Overview and Examples**

Syllabus:

COURSE OBJECTIVES:

1. Understand the social implications of technology and its unintended consequences. Stimulate the discussion of ethical and legal issues raised by some of the new technologies and why we may want to be cautious in embracing them fully.

2. Understand in simple terms the technical details of some of the up and coming technologies that are becoming more present in our daily lives, like autonomous vehicles, artificial intelligence, drones and others

3. Learn about unusual applications and examples of some of the technologies mentioned above, in particular how they may have started and how far they have progressed since.

COURSE OUTLINE:

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| Class # | **Topic** |
| 1. | Technology and COVID-19. Synergy between society and technology. Unintended consequences. Examples. Historical perspective. |
| 2. | Artificial intelligence. Definition(s). Historical perspective. ANI, AGI and ASI. AI methods. Deep learning. Ethics of AI applications medicine, politics, war, etc. |
| 3. | Autonomous vehicles. Autonomous vs Automated. SAE classification of autonomous vehicles. AI role in AV’s. Technical challenges, problems AV’s can’t solve yet. Legal and Ethical issues. |
| 4. | Unmanned aerial vehicles and unmanned aerial systems. History. Classification. Selected interesting applications and their possibilities. |