

ITIS "LEONARDO DA VINCI", PARMA

PROGRAMMA DI LINGUA INGLESE

Anno Scolastico 2024-2025

Classe: V B INF

Docente: Chiara Ghirelli

Libro di testo: **Ardu, Palmer**, Bit by bit, New Edition, Edisco, 2023

*contenuti affrontati in *flipped classroom*, con presentazioni a cura degli studenti

MODULI DISCIPLINARI	
Module 2 "The body of computers"	<ul style="list-style-type: none">• The electronics of computers: integrated circuits, transistors and microprocessors, transmission media• The structure of computers: hardware and software, the CPU and the machine cycle, computer memory, primary storage
Module 3 "The mind of computers"	<ul style="list-style-type: none">• Computer languages: low-level and high-level languages and translation programs, first and second generation languages, third generation languages, fourth generation languages, fifth and sixth generation languages, computer languages vs natural languages• Computer programming: the C family, HTML, JAVA, Python, PHP• Operating systems, user interfaces, other user interfaces, Unix, Linux, Android, Windows, Ubuntu• Citizenship: Digital divide, free operating systems for everybody* Compito di realtà: Asus is giving away 100 computers to NGOs working in a third-world country. As head of the company's IT department, which free OS would best pair with the devices? Prepare a presentation to discuss your view with your colleagues.
Module 4 "The uses of computers"	<ul style="list-style-type: none">• Main software: word processors, spreadsheets, presentation softwares, electronic organizers, databases, SQL
Module 5 "Linking computers"	<ul style="list-style-type: none">• Communication networks: telecommunications, methods of transmission, networks, types of networks, network topologies*, the iso/osi model, TCP/IP• the Internet: the internet and its services, the world wide web, websites and web browser, search engines and web search, content aggregators, cloud computing and cloud storage• Sharing online: social networks, staying online (extra content on classroom)*
Module 6 "Protecting computers"	<ul style="list-style-type: none">• Computer threats: malware, adware, spam and bugs, viruses, worms, crimeware, mobile malware, network threats, cryptography, blockchains, protecting against risks, best practices to protect your computer and

	data, network security, copyright and copyleft, electronic payments and digital currency, big data, customer profiling *per l'intero modulo
--	---

MODULI INTERDISCIPLINARI	
Pros and cons of Artificial Intelligence (Informatica)	<ul style="list-style-type: none"> ● Introduction to the topic: What is Artificial Intelligence? ● Analysing existing data and reports on the topic: pros and cons, the AI Bill of Rights, the EU AI Act, is AI good for society?
Compito di realtà – Set up a company's network (Sistemi e Reti)	<ul style="list-style-type: none"> ● Describing the assigned company and its needs regarding the network ● Choosing the most suitable network topology, components, connecting devices, protocols and standards applied ● Showcasing the presentation as if they were employees of said company
Literary links	<ul style="list-style-type: none"> ● Dystopian novel as a genre: "1984" by George Orwell and its links to today's society [first few pages and general context] ● Four Industrial revolutions, the Great Depression - selected scenes of "Modern Times" by Charlie Chaplin

DIDATTICA ORIENTATIVA	
Future job opportunities	<ul style="list-style-type: none"> ● Reading and interpreting job posts, preparing your resumé and a cover letter ● Job interview dos and don'ts

Parma, 02/06/2025

La docente:

Chiara Ghirelli

I rappresentanti di classe:
