

ITIS "LEONARDO DA VINCI", PARMA

PROGRAMMA DI LINGUA INGLESE

Anno Scolastico 2024-2025

Classe: V A 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 | |
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| 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 |

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