

## Programma di Inglese

### Module 1 - PTCO: APPLYING FOR A JOB:

- Recupero nuclei fondamentali non svolti in classe terza e quarta: my ideal job, soft and hard skills.
- My Internship Report (presentazione powerpoint da parte di ciascun alunno in merito all'esperienza di Alternanza Scuola-Lavoro).
- Steve Jobs - Stanford Commencement Speech 2005
- The Application Process:
  - Understanding job advertisements. -
  - Writing a successful CV
  - The European CV Format.
  - My Video CV (realizzazione di un video CV da parte di ciascun alunno, a partire dalla propria esperienza personale);
  - Job Interviews - Expert advice on job interviews
  - Job Interviews - Mistakes to avoid during a job interview
  - Job Interviews: What you should know about interviews (photocopy).

### Module 3 - PTCO: WORKPLACE SAFETY:

- Workplace safety: useful terms (hazard, risk, damage, injury, precaution, accident).
- What is workplace safety? How can you guarantee workplace safety? Who is responsible for preventing accidents in the workplace? Are accidents in the workplace preventable? How?
- Personal Protective Equipment. PPE Essentials
- Safety Signs – colours and shapes
- Risk Assessment: hazard identification, risk analysis, safety education
- Safety Education (photocopy).
- Safety: Ergonomics.
- User, heal thyself! Healthy Computing:

### Module 4 – TECHNOLOGY

- What is technology?
- What is the difference between technology and science?
- What can technology do for us?
- Advantages and disadvantages of technology.
- How has technology changed the world? Different types of technology.
- TEDTalk: Can technology solve our big problems?
- Project work: a piece of technology that has changed the world (approfondimento individuale da parte di ciascun allievo, con presentazione powerpoint alla classe).

## Module 4 – COMPUTERS

- What makes a computer a computer?
- How does a computer work on the inside? Binary and Data
- Circuits and Logic
- Computer systems: CPU, operating systems
- Hardware and Software
- History of Computing: evolution and shape, generations of computers.
  - Computers get smaller and smaller: desktops, laptops, netbooks, notebooks and hybrids.
  - Advantages and disadvantages.
- Video activity: Steve Jobs Introducing The iPhone At MacWorld 2007
- Mac vs. PC: security, price, operating system, software, quality and options,

## Module 5 – NETWORKS, THE INTERNET AND THE WORLD WIDE WEB

- What is a network?
- Peer-to-Peer and Client-Server networks.
- Types of networks according to size (LAN, WAN, MAN..) or topology (BUS, RING, STAR, TREE, LINE, MESH).
- Advantages and disadvantages of networks.
- What is the Internet?
- Wires, cables and WIFI
- Internet protocols - IP addresses, DNS, TCP...:
- Packets, routers and reliability
- HTTP and HTML
- The Internet and the WWW: a comparison.
- Internet Services: communication (emails, blogs, social networks), E-commerce (B2B, B2C, C2C, C2B, Ebay), leisure (online gaming, reading, listening, watching, social media), information retrieval (browsing VS searching, wikipedia and wikimedia, indexes VS search engines), education

## Module 6 – ROBOTICS AND ARTIFICIAL INTELLIGENCE

- What is a robot?
- What do robots have in common?
- TEDTalk: The jobs we'll lose to machines – and the ones we won't
- Artificial Intelligence