

**PROGRAMMA LINGUA STRANIERA INGLESE**

**ANNO SCOLASTICO 2023-24**

**CLASSE 5 A- BIOSANITARIO**

TESTO UTILIZZATO: **Sciencewise** , English for Chemistry, Materials and Biotechnology di Cristina Oddone editrice San Marco

**Module 5: Organic Chemistry and Biochemistry**

Biochemistry and its relationship with molecular biology and genetics pag 100

Analysing Carbohydrates pag 114

Examining Lipids- , Fatty acids : Omega 3 and 6 pag 116

Triglycerides pag 118

Exploring Proteins pag 119

The importance of food and nutrition: Macro and Micronutrients, Malnutrition pag 121

The food pyramid pag 123

Food problems: allergies and intolerances (lactose) pag 124

**“Supersize Me”** documentary film by Morgan Spurlock, documentario e fotocopie

Consequences of a fast food diet pag 127

Obesity and Diabetes : Type 1 and Type 2 – fotocopie

**Module 6 :Uncovering Life, Biotechnology**

DNA and the secret of life and RNA pag 134

How proteins are synthesized : pag 136

Protein synthesis: Transcription and translation

The discovery of the DNA structure, video on Rosalind Franklin pag 138

Stem Cells , video What are stem cells , video su you tube

Biotechnology and its innovations : hormones, insulin, antibiotics, penicillin pag 138

Genetic Modification-The Human Genome, human gene therapy pag 142

“Dolly the sheep”, The Story of Dolly , video da The New York Times

Artificial cloning: gene, therapeutic, reproductive cloning pag 143

Biotechnology in agriculture pag 147

GMO's in the world pag 149

Biotechnology in the medical field pag 150

### **Module 7: Science and health**

The Human Body pag 162

Vital organs pag 165

The role of the immune system: tasks and components pag 166

video "How does your Immune system work? By Emma Bryce

Dangers for the human body: pathogens, viruses, bacteria and fungi pag 170

Autoimmune diseases: the Celiac Disease, Diabetes Type 1, Multiple Sclerosis

Video "What is a virus?How do they spread? How do they make you sick?", theconversation.com

The importance of vaccines

Visione del film: **Bohemian Rhapsody** - ( 2018) diretto da Bryan Singer basato sulla storia vera dei Queen e Freddie Mercury

- HIV and Aids (fotocopia)

- **Educazione Civica: Prevention and addiction**

Dangers of tobacco and alcohol ; Binge Drinking fotocopie da A Matter of Life ed Edisco

Unit4 Cardiovascular diseases pag 160, Smoking pag 163, Alcohol pag 168,

Sulla emancipazione femminile e il diritto di voto alle donne in Inghilterra

Visione del film **SUFFRAGETTE (2015)** di Sarah Gavron , temi e trama, analisi dei personaggi

Fotocopie e visione di video su "Who were the suffragettes?",

- the activist Emily Davison

- the founder of the Movement: Emmeline Pankhurst, sul sito del Museum of London

- Women during the First World War

La classe è stata inoltre impegnata un'ora alla settimana a partire da gennaio per la preparazione dell' INVALSI .

Parma, 27 maggio 2024

L'insegnante

Gli alunni

Volghi Stefania

