

Course syllabus - Sciences Maestros Higher and Lower (plan docente)

Course Title: Cursos de Inmersión en Lengua Inglesa - Maestros Sciences

Level: A2-C2

Duration: 40 hours (class time)

Student profile:

This course is for students who have a special interest or need to improve their English language knowledge with a special focus on science (The course is especially designed for those maestros who will be required to teach a science based subject using English).

Course Objectives: -GROUP SESSIONS

- To improve oral fluency and comprehension.
- To improve on such essential communication skills as debating, discussing, presenting, and reasoning based on topics from sciences.
- To consolidate and learn vocabulary that can be applied to various aspects of science grounded subjects.
- To consolidate and reinforce existing vocabulary and structures through practical application of the language with a focus on participative communication.
- To allow the student to acquire confidence to speak in public in a variety of settings using specific English.
- To learn about and discuss a broad range of subjects from a variety of science based topics.
- To study and, in some cases, practice the writing skills needed for academic and professional application within this field.

- ONE TO ONE SESSIONS

- Presenting language or concepts to students in an interactive way.
- Encouraging practice through activities.
- Learning positive correction techniques.

Topics:

Statistics and data, presentations, psychology and criminology, experiments and the scientific method, computing and I.T, modern health threats, environmental problems, biotechnology and biomedical engineering, job applications and interview skills, population growth and diminishing resources, inventions.

Grammatical content:

Grammar structures will be practiced during the course through practical application. Specifically needed language structures will be incorporated into the topics.

One-to-one element:

Participants on the maestros courses will attend two 'one-to-one' sessions per day. These sessions will explore methodology behind English language teaching, and give the student the chance to practice with this methodology.

Methodology:

The methodology used is the communicative approach with a very strong emphasis on total participation. Students will be encouraged to actively participate at all stages of the course to maximize their oral use of the language.

New language and structures are taught through elicitation and the use of the language in context. Students are then helped to assimilate these new elements through natural practice (both teacher led and free practice activities).



Maestros Science - Day 1 - Monday



08.30 - 09.00: Breakfast
09:00 - 10:30 Level testing:
 Teachers use prepared questions and test approx. 5 students each.
 While oral tests are being conducted, students are completing a written test.
 Students are graded numerically, with these provisional grades noted.
 *After class on Monday, teachers will review level grades with students' performance in class.
 Any changes will be entered in the Amended level evaluation" form.

10:30-11:30 Ice-breaker games (in groups): Getting to know one another: Students work in pairs to obtain information about each other (10 min) Presentations: Each student must present their partner to the rest of the group.

11:30-11:45 Break

11.45 - 14.15: **Presentations:**
Topics: Types of speeches **Grammar:** Question structures
 What makes a good presentation
 How to choose a topic
 Structure of a presentation
 Writing an effective introduction and conclusion
 Common connectors

Objectives: Learn the names of different types of speeches
 Discuss presentations you have listened to and talk about why they were successful
 Learn new adjectives to describe presentations
 Answer your questions about the Friday presentation
 Discuss what makes a suitable topic
 Talk about how to structure your presentation
 Go over how to organize your introduction
 Practice using common connectors
 Discuss how to write a conclusion
 Give a practice presentation
 Talk about ways to calm your nerves

11:45 – 14:00
 One to One sessions 1
 Teaching techniques

14.15 - 15.30: Lunch with teachers

15.30 - 18:00: **Experiments**
Topics: Describing experiments
 Laboratory supplies
 The Scientific Method
 How to design an experiment
 Laboratory accidents
 Famous experiments

Objectives: Learn common collocations and phrasal verbs related to experiments
 Discuss experiments from your studies or degree
 Talk about amazing experiments currently being performed
 Learn the names of basic laboratory equipment
 Review the scientific method
 Design an experiment to test a hypothesis
 Talk about what can go wrong in a laboratory
 Present a research proposal for an imaginary laboratory
 Research a famous experiment

15:30-17,45
 One to One sessions 2
 Demo Class

18.00 - 18.30: Break

18.30 - 20.30: Group activity
20.30 - 22.00 Dinner

Maestros Science - Day 2 - Tuesday



08.30 - 09.00: Breakfast
09:00 - 09:10 Homework check

09:00 - 11:30
Topics: **Health & Hospitals**
Health science professions
Medical problems and treatments
Language for the doctor's office
Healthcare systems
Medical equipment

Objective: Discuss the challenges of a career in the health sciences
Talk about common health problems and how they are treated
Learn functional language for speaking to patients
Discuss the personality traits necessary for health science professionals
Debate the pros and cons of the Spanish healthcare system
Consider the utility of different medical equipment
Discuss what makes a good hospital
Learn important phrasal verbs related to health
Research a disease and prepare a practice presentation
Learn some common proverbs related to health

11:30-11:45 Break

11.45 - 14.15: **Numbers and Statistics:**
Topics: Big Numbers
Small Numbers
Operations and Calculations
Probability
Statistics, Fractions & Percentages
Describing Graphs & Charts
Surveys

Objectives: Pronounce big numbers accurately
Pronounce small numbers accurately
Perform calculations in English
Discuss probability and risk
Use fractions and percentages
Describe and present data in graphs and charts
Carry out statistical surveys and present data

11:45 – 14:00
One to One sessions 3
Teaching techniques

14.15 - 15.30: Lunch with teachers

15.30 - 18:00: **Technology:**
Topics: Advantages and disadvantages of information technology
Common technology problems
Technology in the classroom
The impact of social media on society
Mobile phone and social media addiction
The future of information technology

Objectives: Analyze famous quotations and compare your opinion to your classmates' views
Discuss the benefits and drawbacks of everyday technological devices
Learn vocabulary to describe common technology problems
Discuss the merits of technology in the classroom in an interactive role play
Present your opinions about social media in a debate
Discuss strategies to reduce the time you spend using mobile devices
Predict the technological innovations of the future and draw up a timeline
Learn key phrasal verbs related to technology
Select items for a time capsule to be opened 100 years from now

15:30-17,45
One to One sessions 4
Demo Class

18.00 - 18.30: Break

18.45 - 20.30: Group activity
20.30 - 22.00: Dinner

Maestros Science - Day 3 - Wednesday



08.30 - 09.00: Breakfast
 09:00 - 09:10 Homework check

09:00 - 11:30
Topics: **Genetics**
 Genetic Statistics
 Nature vs. Nurture
 Heritability
 Family Trees
 Family History Taking
 Pedigrees

Objective: Amazing Genes
 Revise numbers and statistics related to Genetics
 Discuss the impact of genetics and the environment on humans
 Speculate as to which traits can be inherited and which cannot
 Learn which traits can/cannot be passed down through generations
 Learn adjective and verb patterns specific to genetics
 Practice phrasal verbs specific to genetic inheritance
 Describe your family tree and family relationships
 Learn about pedigrees and medical family histories
 Learn about amazing human genes
 Learn hedging language to distance yourself from theories/studies

11:30-11:45 Break

11.45 - 14.15:
Topics: **Engineering:**
 Units of Measurement
 Conversion Tables
 Material Properties and Uses
 Commodity Trading
 Ethics of Mars Colonization
 Engineering a Mars Base
 Choosing an Engineer Team

Objectives: Learn differences in unit measurements
 Revise and practice big numbers
 Practice doing calculations in English
 Describe properties and uses of engineering materials
 Compare engineering materials
 Practice the difference between for and to
 Practice negotiating, trading, buying and selling
 Discuss issues in large-scale engineering projects. Develop a plan for an engineering project
 Negotiate the strengths and weaknesses of candidates when putting together a team of engineers

11:45 – 14:00
 One to One sessions 5
 Teaching techniques

14.15 - 15.30: Lunch with teachers

15.30 - 18:00:
Topics: **Psychology & Criminology**
 Branches of psychology
 Famous psychologists
 Behavioral disorders and treatments
 Famous psychology assessments
 Psychology and the justice system

Objectives: Practice the pronunciation of key terms
 Learn about famous psychologists such as Sigmund Freud and Carl Jung. Discuss different branches of psychology
 Talk about how to treat a group of imaginary patients
 Learn the names of different behavioral problems and talk about how they should be treated
 Discuss Myers-Briggs personality types and how personality influences your life
 Talk about Rorschach tests and evaluate a series of sample images
 Discuss the relationship between dreams and the mind. Debate a series of ethical questions
 Discuss what causes crime and talk about the responsibilities of a forensic psychologist
 Debate whether psychological counseling should be offered to prison inmates

15:30-17,45
 One to One sessions 6
 Demo Class

18.00 - 18.30: Break

18.30 - 20.30: Group activity
 20.30 - 22.00: Dinner

Maestros Science - Day 4 - Thursday



08.30 - 09.00: Breakfast
09:00 - 09:10 Homework check

09:00 - 11:30 **Job Applications and Interview Skills**

Topics:
 Work and professional life
 Applying for jobs and internships
 Best practices for interviews
 CV writing

Objective:
 Review basic vocabulary for jobs and interviews
 Discuss what career paths exist for someone with your qualifications
 Talk about what factors to take into account when considering a job opportunity
 Discuss the importance of internships and work placements
 Learn what documents you need to send with a job application
 Consider the merits of two sample cover letters
 Evaluate several imaginary candidates for a job
 Learn how to describe your strengths, weaknesses and skills
 Think about how to sell yourself effectively in an interview
 Participate in a practice interview
 Learn basic telephone language
 Write a CV in English

11:30-11:45 Break

11.45 - 14.15: **Inventions:**
Topics:
 Important Inventions in History
 Future Inventions
 Robotics and Automation
 Robot Programming
 Issues in Robotics
 Invention Business Idea

Objectives:
 Discuss the importance of different inventions
 Speculate as to when different inventions were first developed
 Learn adjectives related to inventions
 Discuss the trade-offs of future inventions
 Learn compound adjectives related to inventions
 Discuss the roles of robots and the effects they will have on our lifestyle
 Discuss the risk of automation to different professions
 Describe tasks commonly carried out by robots
 Practice giving instructions and commands
 Discuss ethical issues in robotics
 Create and present a sales pitch for a new invention

11:45 – 14:00
 One to One sessions 1
 Teaching techniques

14.15 - 15.30: Lunch with teachers

15.30 - 18:00: **Lesson chosen depending on group:**
Possible Topics:
 - Anatomy
 - Dentistry
 - Veterinary Science
 - Pharmacy
 - Biomedical Engineering
 - Nutrition

15:30-17,45
 One to One sessions 2
 Demo Class

18.00 - 18.30: Break

18.30 - 20.30: Group activity
20.30 - 22.00: Dinner

Science High - Day 5 - Friday



08.30 - 09.00: Breakfast
09:00 - 09:10 Homework check

09:00 - 11:30 **Environment**
Topics: Environmental problems
Solutions to environmental issues
Energy sources
Endangered species
Natural disasters

Objective: Compare your views on the environment to your classmates' opinions
Brainstorm environmental problems and propose solutions
Practice language for cause and effect
Prepare a presentation to raise awareness about an environmental issue
Compare renewable and nonrenewable energy sources
Discuss the benefits and drawbacks of nuclear energy
Practice first, second and third conditionals
Choose an endangered species to protect
Learn vocabulary to discuss natural disasters

11:45 – 14:00
One to One sessions 1
Teaching techniques

11:30-11:45 Break

11.45 - 14.15: **Student presentations:**
Students, in their groups perform the presentations they have been working on as an on-going homework activity. They will receive structured feedback from both teacher and classmates.

14.15 - 15.30: Lunch with teachers

15.30 - 17:00: **FINAL EXAM AND EVALUTATIONS**
Student will take final exam and fill out all necessary paperwork for the course. There will also be a chance to consolidate their learning from the week.

15:30-17,45
One to One sessions 2
Demo Class

18.00 Finish

