

# Course syllabus (plan docente)

## Maestros Science Higher/Lower



**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 to the rest of the group.

**11:30-11:45** Break

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

**Grammar:** Question structures

**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 - 21.30:** Dinner

# Maestros Science - Day 2 - Tuesday



08.30 - Breakfast  
 09.00: Homework check  
 09:00 - 09:10  
 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:**  
 Big Numbers  
 Small Numbers  
**Topics:** 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:**  
 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:  
 20.30 - 21.30:  
 Group activity  
 Dinner

# Maestros Science - Day 3 - Wednesday



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

09:00 - **Genetics**  
 11:30 Genetic Statistics  
**Topics:** 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 - **Engineering:**  
 14.15: Units of Measurement  
**Topics:** 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 - 15.00 **Lunch with teachers**

15.30 - **Psychology & Criminology**  
 18:00: Branches of psychology  
**Topics:** 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 - **Break**

18.30: Group activity  
 20.30: Dinner  
 20.30 -  
 21.30:

# Maestros Science - Day 4 - Thursday



08.30 - Breakfast  
09.00: Homework check  
09:00 - 09:10  
09:00 - **Job Applications and Interview Skills**

11:30 - Work and professional life  
**Topics:** 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 - **Inventions:**  
14.15: Important Inventions in History  
**Topics:** 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 - **Lesson chosen depending on group:**  
18:00: - Anatomy - Pharmacy  
**Possible** - Dentistry - Biomedical Engineering  
**Topics:** - Veterinary Science - 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 - 21.30: 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