VISION
Students of Sekolah Ciputra are proud of their national identity, embrace the spirit of entrepreneurship, celebrate cultural diversity and possess the skills, integrity and resilience to participate in a changing global society.

MISSION
The school’s mission describes the things we must do in order for the vision to be achieved.

At Sekolah Ciputra we teach our students to:

• Take pride in their national and cultural heritage
• Demonstrate integrity, respect and empathy towards others
• Think critically and apply their learning in creative, innovative and entrepreneurial ways
• Communicate their thoughts and ideas in Bahasa Indonesia, English and Mandarin
• Achieve academically at the highest standard of which they are capable
• Respond with confidence and reason to an ever-changing world
• Fulfil their social and civic responsibilities, both nationally and globally.

IBO MISSION STATEMENT
The International Baccalaureate Organisation aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect. To this end the IBO works with schools, governments and international organisations to develop challenging programmes of international education and rigorous assessment. These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

SCHOOL POLICIES
The Inclusion, Academic Honesty, Assessment and Language policies can be found on the school website here: http://www.sekolahciputra.sch.id/wp-content/uploads/2018/01/school-policies-related-to-students.pdf

WHAT IS THE DIPLOMA PROGRAMME?
The Diploma Programme is an academically challenging and balanced international curriculum aimed at 16-19 year olds, including final examinations that prepare students for success at university and life beyond. It has been designed to address the intellectual, social, emotional and physical well-being of students. The programme was the first to be offered by the International Baccalaureate in 1968 and has gained recognition and respect from the world’s leading universities.

The Diploma Programme prepares students for effective participation in a rapidly evolving and increasingly global society as they:

• Develop physically, intellectually, emotionally and ethically.
• Acquire breadth and depth of knowledge and understanding, studying courses from six different subject groups.
• Develop the skills and a positive attitude towards learning that will prepare them for higher education.
• Study at least two languages and increase their understanding of cultures, including their own.
• Make connections across traditional academic disciplines and explore the nature of knowledge through the programme’s unique theory of knowledge course.

SEKOLAH CIPUTRA PATHWAYS
At Sekolah Ciputra all Grade 11 and 12 students are Diploma Programme (DP) students. In Grade 10, students follow the ‘Pathways Process’ in order to choose the best way to achieve their ambitions for further education and adult life. There are three pathways to choose from, which are all part of the International Baccalaureate Diploma Programme (IBDP):

IBDP

FULL DP

COURSES

COURSES WITH UNAS

Each Pathway allows students to select a variety of subject courses that are studied alongside Religion, Civics and the IB Core. Subjects can be studied at:

• ‘Higher Level’ (HL) - 8 teaching periods over two weeks
• ‘Standard Level’ (SL) - 6 teaching periods over two weeks
• ‘UNAS Based’ (UB) - 6 teaching periods over two weeks

Only Courses students can choose UB options, which are only offered in Science and Humanities subjects.

It is recommended that:

• Students who want to achieve direct entry to degree level study at universities abroad, take the Full DP.
• Students who want to focus on less academic pursuits, or who feel entering universities abroad at foundation level is better for them, take Courses.
• Students who want to study at Indonesian universities, take Courses with UNAS.

WHAT IS THE DP CORE?
 THEORY OF KNOWLEDGE

Theory of Knowledge aims to help develop critical thinking skills in order that students can learn to assess how certain they can be of the knowledge they acquire in different subject areas of the DP. In other words, students reflect on the nature of knowledge and how they know what they know to become more holistic learners. It is a fundamental part of the IB approach and therefore a required course for all full Diploma Programme students.

Skills Developed

Students read about and discuss a wide variety of topics. This develops their presentation and debating skills and enhances their ability to appreciate alternative points of view, so that they can develop a better understanding of complicated problems of knowledge. It also develops their ability to acknowledge and analyse these types of problems and write coherent, structured essays in an academic style.

Assessment

TOK Essay can be broken up as follows:

External Assessment - 67%

Students are required to write a TOK essay of between 1200 and 1600 words on an IB Prescribed Title.

Internal Assessment - 33%

Students are required to do a presentation (normally done in a group) on a knowledge question extracted from a real life situation of their choice. For example: ‘How far do ethical considerations limit the pursuit of scientific research?’
OVERVIEW

THE EXTENDED ESSAY
Key features of the Extended Essay:
• It is compulsory for all students taking the Diploma Programme.
• Its purpose is to develop skills in the methods of critical research.
• Its process helps prepare students for success at university and in other pathways beyond the Diploma Programme.
• It is a piece of independent research on a topic chosen by the student, from one of their Diploma Programme subjects, and in consultation with a supervisor in the school.
• It is presented as a formal piece of sustained academic writing (similar to a mini-thesis) containing no more than 4,000 words accompanied by a reflection form of no more than 500 words.
• It is the result of approximately 40 hours of work by the student.
• Students are supported by a supervision process recommended to be 3–5 hours, which includes three mandatory reflection sessions.
• The third and final mandatory reflection session is the viva voce, which is a concluding interview with the supervising teacher.

Overview of the assessment criteria for the extended essay:

<table>
<thead>
<tr>
<th>CRITERION A: FOCUS &amp; METHOD</th>
<th>CRITERION B: KNOWLEDGE &amp; UNDERSTANDING</th>
<th>CRITERION C: CRITICAL THINKING</th>
<th>CRITERION D: PRESENTATION</th>
<th>CRITERION E: ENGAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic</td>
<td>Research question</td>
<td>Methodology</td>
<td>Context</td>
<td>Subject-specific terminology and concepts</td>
</tr>
<tr>
<td>Marks</td>
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<td>6</td>
<td>6</td>
<td>12</td>
<td>4</td>
<td>6</td>
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</tbody>
</table>

Students following Courses or Courses with UNAS must write an EE for their Sekolah Ciputra High School Diploma. The EE will be marked internally by Sekolah Ciputra teachers, however, students can choose to have their EE marked by the IB for an additional fee.

THE CAS Programme
The Creativity, Activity and Service (CAS) Programme aims to develop critical global citizens who are able to look at global issues on a local scale and challenge themselves physically and mentally.

CAS is organised around the three strands of Creativity, Activity and Service defined as follows:
• Creativity—exploring and extending ideas leading to an original or interpretive product or performance
• Activity—physical exertion contributing to a healthy lifestyle
• Service—collaborative and reciprocal engagement with the community in response to an authentic need

LEARNING OUTCOMES
As a result of their CAS experience as a whole, including their reflections, there should be evidence that students have met the following learning outcomes:
1. Identify own strengths and develop areas for growth
2. Demonstrate that challenges have been undertaken, developing new skills in the process
3. Demonstrate how to initiate and plan a CAS experience
4. Show commitment to and perseverance in CAS experiences
5. Demonstrate the skills and recognise the benefits of working collaboratively
6. Demonstrate engagement with issues of global significance
7. Recognise and consider the ethics of choices and actions

REQUIREMENT OF CAS PROGRAMME:
1. The CAS programme will be run for 18 months
2. The minimum duration of one CAS project is a month including the preparation, activity and reflection.
3. All CAS learning outcomes should be completed at least once in 18 months
4. Students should complete at least one Creativity, Activity and Service strand in both collaborative and individual CAS in 18 months
5. Students should undertake a balanced number of Individual and Group CAS activities
6. CAS timeline is August 2019 through to January 2021

THE THREE PATHWAYS

1. FULL IB DIPLOMA
   GENERAL INFORMATION
   The curriculum is made up of the DP Core and six subject groups:
   - Group 1 - Language and Literature
   - Group 2 - Language Acquisition
   - Group 3 - Individuals and Societies
   - Group 4 - Sciences
   - Group 5 - Mathematics
   - Group 6 - The Arts
   • Performance in each of the six IB Diploma subjects is graded on a scale from 1 point (minimum) to 7 points (maximum)
   • A maximum of 3 points is awarded for combined performance in Theory of Knowledge and the Extended Essay. See bonus points matrix (next page)
OVERVIEW

- The maximum total Diploma Programme point score is 45.
- Each student must submit all TOK components and an Extended Essay in order to be awarded the full IB Diploma.
- The IB Diploma will be awarded to a candidate provided all the following requirements have been met:
  - CAS requirements have been met.
  - A candidate's total points are at least 24.
  - A candidate has not received an N for Theory of Knowledge, the Extended Essay or for a contributing subject.
  - A candidate has not received a Grade E for Theory of Knowledge and/or the Extended Essay.
  - No grade 1 awarded in any subject/level.
  - No more than two grade 2’s have been awarded (HL or SL).
  - No more than three grade 3’s have been awarded (HL or SL).
  - A candidate has gained at least 12 points on HL subjects (if a candidate studies 4 HL subjects, then the three highest grades count).
  - A candidate has gained 9 points or more on SL subjects (candidates studying 2 SL subjects must gain at least 5 points at SL).
  - A maximum of three examination sessions is allowed in which to satisfy the requirements for the award of the IB Diploma.

COURSE SELECTION

There are some important guidelines that must be followed in order for your child to qualify for a full IB Diploma:

- All students must choose six subjects, one from each of the subject groups 1-5 AND either an arts subject from Group 6 or a second subject from from Groups 1 to 5 (including a second Language A or B if they so choose).
- Three subjects must be studied at Higher Level (HL) and three subjects must be studied at Standard Level (SL).
- Environmental Systems and Societies is an interdisciplinary subject that counts as a subject towards both Group 3 and 4, giving a student the flexibility to study an additional subject from any other Group.
- Your subject choices must be based on your abilities, interests and any university requirements. In addition, you should be taking an English subject at a suitable level which challenges you and prepares you for study at an overseas University.
- Indonesian students are required to take Bahasa Indonesia for Group 1 or Group 2.
- Group 2 courses are for students who are learning a language that is not their mother tongue. Indonesian students who want to study Indonesian B must get approval from the DP coordinator.

2. DP COURSES PROGRAMME

The DP Courses Programme is designed for those students who are interested in studying overseas but are unable to meet the rigorous requirements of the full Diploma Programme.

These students are required to complete the following:
1. 5-6 subjects (including an English, Mathematics and either a Science or I&S subject).
2. Indonesian students are required to take Bahasa Indonesia for Group 1 or Group 2. They must get approval from the DP coordinator in order to study Language B.
3. Extended Essay (4,000 words for IB) - (3,000 words for school based).
4. CAS (IB or school based).
5. Religion, Civics and PE (school based).

DP Courses students can choose any combination of HL/SL subjects, with a maximum of 3 HL subjects, for example 2 HL and 3 SL or 0 HL and 6 SL.

DP Courses students can choose TOK (IB) or Design Enterprise (school based).

3. DP COURSES WITH UNAS PROGRAMME

The DP Courses with UNAS is designed to allow students to study at Indonesian universities whilst also gaining internationally recognised qualifications, which will aid them with applying to foreign universities should they choose to do so.

These students are required to complete the following:
1. Two DP language subjects and one Maths at either HL or SL.
2. Indonesian students are required to take Bahasa Indonesia for Group 1 or Group 2.
3. They must get the approval of the DP coordinator in order to study Language B.
4. Three of either Science or Humanities subjects (school / UNAS based).
5. Design Enterprise (school based).
6. One of Music, Visual Art or Mandarin (school based).
7. Extended Essay (4,000 words for IB) - (3,000 words for school based).
8. CAS (IB or school based).
SUBJECTS

GROUP 1 – LANGUAGE AND LITERATURE

1. ENGLISH & INDONESIAN LANGUAGE A: LANGUAGE & LITERATURE HL/SL

What is it about?

Language A: Language and Literature can be studied in either English or Indonesian. Both courses look at three key areas of exploration:

- Readers, writers and texts
- Time and Space
- Intertextuality: connecting texts

In ‘Readers, writers and texts’ we look at the ways in which texts are produced, read, interpreted, responded to and performed, and explores the role of language and literature. In it, students will be developing the skills and approaches required to engage with how meaning is created in texts. Students will be attentive to the words on the page, the literal meaning of words, the type of text being read and the themes.

In ‘Time and Space’ we consider how a text interacts with the context in which it is produced and received. In it, students will be developing skills and approaches required to explore how texts are affected by a wide variety of factors such as the life of the author, the times the author lived in, and the way the context of reception and the text impact each other. Students will look at how the texts they are reading represent, reflect and become part of life and culture.

In ‘Intertextuality: connecting texts’ we focus on the connections between and among diverse texts, traditions, creators and ideas. In it, students will develop skills and approaches required to compare and contrast texts in order to gain a deeper understanding of the unique characteristics of texts and the interesting connections between them. Students will look at how texts affect each other, and at the wide range of ways texts can be connected and grouped.

Literary works from past years have included: Poetry by Robert Frost and Emily Dickinson, 1984, by George Oruelli; Macbeth by William Shakespeare; The Quiet American by Graham Greene; Persepolis by Marjane Satrapi; Cat’s Cradle by Kurt Vonnegut; The Road by Cormac McCarthy, Antigone by Sophocles; Purple Hibiscus by Chimamanda Ngozi Adiche.

The works in the Indonesian course have included: Burung-Burung Rantau (novel by YB Mangunwijaya), Ronggeng Dukuh Paruk (novel by Ahmad Tohan), Pulang (novel by Leila S. Chudori), 2 Di Batas Cakrawala (poetry by Dhenok Kristianti), Felix Mencuci (poetry by Liberatus Tengsoe Tjahjono), Nyanyian Akar Rumput (poetry by Wiji Thukul), 8 Literary works 6 Literary works

<table>
<thead>
<tr>
<th>SL</th>
<th>HL</th>
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<tbody>
<tr>
<td>Internal Assessments</td>
<td>4 Literary works</td>
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<tr>
<td></td>
<td>6 Literary works</td>
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<tr>
<td>External Assessments</td>
<td>Individu Oral</td>
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<td></td>
<td>Individu Oral</td>
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<tr>
<td>Paper 1: Guided Textual Analysis (1 hour 15 minutes)</td>
<td>HL Essay</td>
</tr>
<tr>
<td>Paper 2: Comparative Essay (1 hour 45 minutes)</td>
<td>Paper 1: Guided Textual Analysis ( 2 hours 30 minutes)</td>
</tr>
<tr>
<td></td>
<td>Paper 2: Comparative Essay (1 hour 45 minutes)</td>
</tr>
</tbody>
</table>

Recommended Prerequisites

HL - Minimum of 1 year of Language and Literature with minimum scores of 5 in Criteria A, B, C, and D.

SL - Minimum of 1 year of Language and Literature or Phase 6 with minimum scores of 5 in Criteria A, B, C, and D.

GROUP 2 – LANGUAGE ACQUISITION

2. LANGUAGE B: ENGLISH HL, INDONESIAN HL/SL, MANDARIN SL

What is it about?

Language acquisition courses are courses designed for students with a prior background in the language but who can still improve their grammar, vocabulary, pronunciation, receptive and productive skills to a high level of proficiency. In addition, there is a strong emphasis on exploring and deepening our understanding of the culture behind the language.

Students study:

- 5 compulsory areas of study: identities; experiences; human ingenuity; social organization; sharing the planet
- a variety of text types: personal, professional, mass media
- two works of literature in HL courses
- receptive and productive skills: reading; listening; speaking; writing

Why Study Language B?

Language B helps students develop linguistic competence and intercultural understanding. It encourages students to communicate clearly using appropriate language to express their ideas fluently and accurately in a variety of situations. Understanding and creating a range of written, audio and visual texts is an essential skill for future work and study.

English

As the leading global language, English requires little introduction in terms of its importance to students’ futures; from aiding success in academics and careers to enjoying films, music and the internet.

Indonesian

As the national language of the country we study, work and live in, competence in Indonesian is a must for socializing, business transactions and everyday life.

Mandarin

As the most spoken language in the world and the language of the world’s second biggest economy, Mandarin is an important international language. In addition, it is widely spoken in the influential Chinese communities of Indonesia, Thailand, Malaysia, Singapore, Brunei, the Philippines and Mongolia.
# SUBJECTS

## GROUP 3 – INDIVIDUALS AND SOCIETIES

### 1. BUSINESS MANAGEMENT

**What is it about?**
Business and Management is the rigorous and critical study of how organisations operate, what they do, their styles of management, their business strategies and how these may be influenced by the internal and external environment.

The course is very diverse and features an in depth review of the four main business functions of human resource management, finance and accounts, marketing and operational management. Links between the topics are central to the course, as this integration promotes a holistic overview of business management. Through the exploration of six concepts underpinning the subject (change, culture, ethics, globalisation, innovation and strategy), the business management course allows students to develop their understanding of interdisciplinary concepts from a business management perspective. Linked to the content and six concepts are business case studies that students are expected to integrate into their understanding of the course. The course encourages the appreciation of ethical concerns as well as issues of corporate social responsibility at both a local and global level.

**Why Study this Subject?**

- Develops your capacity to think both analytically and critically and your project management skills
- Enhances your ability to make considered and ethical decisions and to think strategically and undertake long term planning.
- Improves your understanding of globalisation and other external changes affecting business
- A background in business is helpful in a wide variety of disciplines, including the study of law, international studies, political sciences and a wide range of business-related courses.

**What do I need to bring?**

- Ability to work independently.
- Confidence with numbers.
- Self-motivated to undertake directed pre-reading prior to every lesson.
- A genuine interest in the business world.

### 2. ECONOMICS

**What is it about?**
Economics is a dynamic social science that deals with scarcity, resource allocation and the methods and processes by which choices are made in the satisfaction of human wants. As a social science, economics uses scientific methodologies that include quantitative and qualitative elements.

It emphasises the economic theories of microeconomics, dealing with economic variables affecting individuals, firms and markets, and the economic theories of macroeconomics, which deal with economic variables affecting countries, governments and societies. These economic theories are not to be studied in a vacuum—rather, they are to be applied to real-world issues. Prominent among these issues are fluctuations in economic activity, international trade, economic development and environmental sustainability.

SL and HL students of economics are presented with a common syllabus, with an HL extension in some topics. The syllabus for both SL and HL students requires the development of certain skills and techniques, attributes and knowledge— as described in the assessment objectives of the programme. While the skills and activity of studying economics are common to both SL and HL students, the HL student is required to acquire a further body of knowledge— including the ability to analyse, synthesize and evaluate that knowledge—and to develop quantitative skills in order to explain and analyse economic relationships.

**Why Study this Subject?**

The overall aim of the course is to give students a deeper understanding of the nature and scope of economics. The different parts of the course are designed to complement each other enabling students to develop a range of fundamental economic skills. The study of economics helps foster internationalism as well as being congruent with the entrepreneurial special character of the school as stated in the school vision.

### 3. GLOBAL POLITICS

**What is it about?**
The 21st century is characterized by rapid change and increasing interconnectedness, impacting individuals and societies in unprecedented ways and creating complex global political challenges. Global politics is an exciting, dynamic subject that draws on a variety of disciplines in the social sciences and humanities, reflecting the complex nature of many contemporary political issues.

The core units of the course together make up a central unifying theme of “people, power and politics.” The emphasis on “people” reflects the fact that the course explores politics not only at a state level but also explores the function and impact of non-state actors, communities, groups and individuals. The concept of “power” is also emphasized as being particularly crucial to understanding the dynamics, tensions and outcomes of global politics. Throughout the course, issues such as conflict, migration or climate change are explored through an explicitly political lens.
SUBJECTS

5. Psychology

Psychology is the science of mind and behavior. It views mental processes and behaviors from three core perspectives: the biological (the brain structure and functions, hormones, and genetics explanation of behavior); cognitive (cognitive processing, memory and emotion); and sociocultural factors (the individual, groups, and culture). It understands the importance of occupying multiple perspectives in providing a comprehensive explanation of behavior. As a result, it requires students to always reflect on the three approaches in viewing behavior. This requires students to study a broader aspect of knowledge and apply their critical thinking and research skill.

Why Study this Subject?

The study of global politics enables students to critically engage with different and new perspectives and approaches to politics in order to comprehend the challenges of the changing world and become aware of their role in it as active global citizens. Global Politics allows students to develop an understanding of the local, national, international, and global dimensions of political activity and processes, as well as to explore political issues affecting their own lives. The course helps students to understand abstract political concepts by grounding them in real-world examples and case studies. It also invites comparison between such examples and case studies to ensure a wider and transnational perspective.

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4. PHILOSOPHY

What is it about?
The philosophy course provides an opportunity for students to engage with some of the world’s most interesting and influential thinkers throughout history. The emphasis of the DP philosophy course is on ‘doing philosophy’, that is, in actively engaging students in philosophical activity. The course is focused on stimulating students’ curiosity and encouraging them to examine their own perspectives and those of others.

Both HL and SL study the core theme ‘Being Human’ and produce an internally assessed essay analysing a non-philosophical stimulus. HL study two and SL one of the optional themes chosen from among the following list: aesthetic, epistemology, ethics, philosophy and contemporary society, philosophy of religion, philosophy of science and political philosophy. At HL, students are also required to reflect on the nature of philosophical activity itself.

Why Study this Subject?

Studying philosophy develops highly transferable skills such as the ability to formulate arguments clearly, to make reasoned judgments and to evaluate highly complex and multifaceted issues. The focus on written analysis and evaluation could be simultaneously beneficial for the analytical components of other DP subjects being studied.

GROUP 4 - SCIENCES

1. BIOLOGY

What is it about?
The IBDP Biology course has been designed to give students a comprehensive overview of the different fields and areas of study within the discipline, develop analytical and application of knowledge skills, and engage students with issues of global importance.

All students study a common ‘core’ curriculum and 1 ‘option’ topic area. Students who choose to take Biology at Higher Level will study additional core topics and the option in greater depth and complexity.

Why Study Biology?
Fundamentally, everything is built on the laws of physics and rules of chemistry but when those basic pieces get put together in just the right way, they create something wonderful and astounding and much greater than the sum of its parts: LIFE. Understanding the intricacies and interactions that lead to this phenomenon is a challenging and rewarding pursuit. What could be more relevant to you than understanding yourself on the most fundamental levels and as a part of the dynamic system in which we live?
3. Environmental Systems and Societies (ESS)*
What is it about?
Environmental Systems and Societies (ESS) is a course designed to combine areas of social and experimental science in order to help develop a holistic understanding of how humans and the environment interact with each other both historically and in modern contexts. Students will be engaged in examining and developing their own value systems as well as evaluating the impact of human actions in a global context.

This course focuses heavily on international mindedness, using case studies and examples from a wide variety of societies around the world (including Indonesia). Students will develop an understanding of the fundamental principles of Environmental Science and look further into how we are all connected to and impact natural systems. Students will develop the ability to apply concepts to their own lives, evaluate the impact of current human activities in different societies, and examine alternative ideas and value systems in different regions around the world.

*This course can be applied to fulfil either the Group 3 or 4 requirement of the IB Diploma Programme and is offered only at Standard Level.

Why Study ESS?
From the 1950s to today, the global population has more than doubled. Resource use, however, has increased roughly sixfold in the same time period. What has created this situation and what might need to change? How does our culture and upbringing influence our attitudes and decisions in this regard? How do growing populations (human or otherwise) impact their surroundings? What are the essential issues that will help determine the long-term fate of humanity on this planet? These are some of the questions posed in the study of ESS. The answers are not clear or constant answers, as understanding and innovation are dynamic. Where do you fit in to all of this? How do you impact the world around you? Why does any of that matter?

4. PHYSICS
What is it about?
The IB Diploma Physics course will give you some understanding of the basic laws that govern everything from the very smallest particles that make up atoms – currently accepted as quarks, which may be truly fundamental – to the very large cosmic scale of the observable Universe. There is a large practical element to the course. In previous years students have performed labs on: finding the wavelength of a laser, finding the speed of sound by using a resonance tube, calculating the acceleration due to gravity by using a pendulum, developing a mathematical model for climate change and using video analysis to find the terminal velocity of a balloon to name but a few.

Why Study Physics?
• Physics is possibly the most exciting intellectual journey of our age – discoveries being made now will change your life, and studying physics will change the way in which you think about the world around you.
• The DP Physics course is valued and respected by Universities all around the world due to its challenging nature and academic rigour.

GROUP 5 - MATHEMATICS

This is an exciting time to be a mathematics student because the DP mathematics programme, after 20 years, has changed significantly resulting in two new pathways:

Mathematics: Analysis and Approaches, and Applications and Interpretations.
SUBJECTS

What is Mathematics: Analysis and Approaches?
This course recognises the need for analytical expertise in a world where innovation is increasingly dependent on a deep understanding of mathematics. This course includes topics that are both traditionally part of a pre-university mathematics course (for example, functions, trigonometry, calculus) as well as topics that are amenable to investigation, conjecture and proof.

Why Study Mathematics: Analysis and Approaches?
Mathematics: Analysis and Approaches is for students who enjoy developing their mathematics to become fluent in the construction of mathematical arguments and develop strong skills in mathematical thinking. They will also be fascinated by exploring real and abstract applications of these ideas, with and without technology. Students who take Mathematics: analysis and approaches will be those who enjoy the thrill of mathematical problem solving and generalization.

Distinction between SL and HL
Students who choose Mathematics: Analysis and Approaches at SL or HL should be comfortable in the manipulation of algebraic expressions and enjoy the recognition of patterns and understand the mathematical generalization of these patterns. Students who wish to take Mathematics: analysis and approaches at the higher level will have strong algebraic skills and the ability to understand simple proof. They will be students who enjoy spending time with problems and get pleasure and satisfaction from solving challenging problems.

What is Mathematics Applications and Interpretations?
This course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics.

Why Study Mathematics: Applications and Interpretations?
Mathematics: Applications and Interpretation is for students who are interested in developing their mathematics for describing our world and solving practical problems. They will also be interested in harnessing the power of technology alongside exploring mathematical models. Students who take Mathematics: applications and interpretation will be those who enjoy mathematics best when seen in a practical context.

Distinction between SL and HL
Students who choose Mathematics: Applications and Interpretation at SL or HL should enjoy seeing mathematics used in real-world contexts and to solve real-world problems. Students who wish to take Mathematics: applications and interpretation at higher level will have good algebraic skills and experience of solving real-world problems. They will be students who get pleasure and satisfaction when exploring challenging problems and who are comfortable to undertake this exploration using technology.

GROUP 6

1. MUSIC (SL & HL)
What is it about?
The IB DP Music programme provides opportunities for students to not only develop and hone their performance and/or composition skills, but also their analysis and research-based study of Music. This sets up students who wish to pursue Music at a tertiary level or simply for those who seek a lifelong engagement with Music and the Arts. As well as investigating Music from the Western European classical canon, students also explore a range of contemporary music genre, as well as traditional music from cultures around the world.

The Sekolah Ciputra Music department is well equipped, providing students with access to Music-dedicated computers with licenced recording and composing software (ProTools, Sibelius & Reason) as well as a number of performance spaces, including Ciputra Hall. For examples of past DP Music compositions please check out: www.bandcamp.com/sekolahciputramusic

Students should be currently taking instrumental or vocal lessons or, are prepared to do so through Grades 11 and 12. There are a number of streams available in both the SL and HL programmes that cater for students wishing to focus on performing, composing or music technology and so discussion with the DP Music Teacher is strongly recommended to determine the most suitable course.

Why study Music?
Research shows again and again that students who study Arts tend to perform better academically than those who do not, but there are further reasons why the Arts are an important part of an effective education. Arts help students build confidence, develop motor skills, and hone their decision-making and problem-solving skills.

Completing the DP Music programme will enrich your appreciation and understanding of Music both as a listener and as a player, singer or composer. The depth comes from studying and exploring not only your own personal connection and interaction with Music but also how music has developed and played a role in the lives of humans throughout time and indeed, how it continues to develop and change.

Regardless of whether you decide to continue to study Music at university or not, the DP course will help lay the foundations for a lifelong engagement with Music and the Arts – which is likely to lead to an array of incredible personal and collective experiences.
2. VISUAL ARTS
What is it about?
There are three core areas:
- Visual Art in Context: The why of art? Why do different cultures make art? What does it tell us about our history and us? Are there rules to making art and can I break them?
- Visual Arts Methods: Making art in the studio using a wide range of media from photography and digital manipulation to painting, sculpture, installation, textiles and more. This course encourages you to explore different ways of making art (including outside your comfort zone).
- Communicating Visual Arts: You will produce a series of art works for an exhibition, how best to present your work so as to make an impact on the viewers.

The difference between SL and HL: Both HL and SL complete the same quantity of work over the 2-year course; however, SL can submit fewer pieces of work for the Grade 12 internal and external assessments. HL students have more class contact time than SL, which means better access to materials and facilities.

Pre-requisites
A recommended minimum grade of 6 in Grade 10 MYP Visual Art for SL or HL Visual Arts. A serious commitment to the subject is needed to ensure that the student can meet the volume of journal exploration and studio production required.

Why Study this Course?
The DP Visual Arts course is a journey of self-discovery that will develop your creative thinking skills and challenge the way you interact with the world around you. You will learn how to make meaning through your own artworks as well as interpreting the works of others. DP Visual Art will assist you in further studies and a career in areas such as producing, managing, curating visual art, photography, graphic design, game design, fashion design, interior decoration, creative roles in film and television including computer generated graphics, set design, costume design and more.

1. ECONOMICS AND ACCOUNTING
What is it about?
What causes a recession? How to improve a country’s economic condition? What are the causes and effects of inflation? Why stock price fluctuates? Economics can help us answer these questions. Economics is the study of how people use resources and responds to incentives. It ranges from individual to a country scope. Economics is a broad discipline that helps us understand economics trends, interprets today’s headlines, and make predictions about the coming year.

School / UNAS Based Subjects
- Humanities

1. Economics and Accounting
What is it about?
Economics is the backbone of a business. Its function is to monitor the finances of a company. It is an area guided by analytics and analytical methods, and the data extracted from such tasks offers a company with a record of its economic health and sustainability. Financial reports generated from this information can drive a company’s strategies in both the short and long term.

Why Study this Subject?
This course’s aim is to build students’ knowledge of a diverse range of economic studies such as microeconomics, macroeconomics, accounting and investing. Students will learn about the subject through both real-world and fictional case studies. This subject is particularly helpful for students who are taking any subjects within the economic faculty, namely Economics, Accounting, Management, Commerce, Business, Marketing, and Finance. Besides the IB curriculum, the subject’s structure is also adapted to the national curriculum in order to prepare students to excel in the national exam.

Learning outcome:
- Engagement with disciplinary knowledge
- Analytical and critical thinking
- Ability to engage in independent and reflective learning
- Information literacy skills
- The capacity to contribute to, and work with different groups of people
- Ability to communicate effectively both orally and in written.

2. Sociology
What is it about?
Sociology tries to understand and explain the relationship between people and the societies they live in. The subject matter of sociology consist of the actions and beliefs of people in social groups, the relationships between social groups and the ways in which people’s actions can change society as well as the ways that social change in the whole society affects different social groups.

Core Topics
- Theory and Method
- Culture, Identity and Socialisation
- Social Research
- Social Inequality
- The Family
- Education
- Crime, Deviance and Social Control
- The Media

Why Study this Subject?
To study sociology is to see the society objectively. We will be able to see how everyone in the society can be impacted by factors as well as individuals. We are living in the world where big changes happen in daily basis and by studying Sociology, we can explore why some of the changes take place and what the implications of the changes are for the rest of the world.
3. GEOGRAPHY

What is it about?
Geography is a dynamic social science that deals with the phenomena that occur in the atmosphere and below. It is specifically related to the interaction of human action and natural processes on the planet. As a social science, Geography uses scientific methods of inquiry, both quantitative and qualitative, to investigate the topics. The subject teaches and encourages students to develop a variety of skills to identify and analyze geographical phenomena, e.g. mapping skills and map analysis.

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<tr>
<th>TOPIC</th>
<th>RELATED TOPICS (non-exhaustive list)</th>
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<tbody>
<tr>
<td>General</td>
<td>Map and Satellite image (Cartography)</td>
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<td>Concepts of Geography</td>
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<td>Physical Geography</td>
<td>Weather and Climate</td>
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<td>Universe and Solar system</td>
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<td>Human and Social Geography</td>
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<td>Sustainable Environment</td>
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<td>Developed and Developing country</td>
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Recommended Prerequisite(s)
An interest in Geography and the ability to interpret or analyse maps as a basic skill.
Able to use spatial tools or equipment. For example: compass, bearing, protector and satellite image (e.g. google earth and google maps).

Why study this subject?
The overall aim of the course is to give students a deeper understanding of natural processes and interaction between human action and the environment. We encourage students to examine their perspectives on the environment and human activity in order to determine the best ways to keep it in balance.

Geography teaches a broad variety of transferable skills that will prove useful to students in everyday life, future study and the workplace.

1. BIOLOGY

What is it about?
Biology is the study of life. Students will start at the microscopic and explore the topics of cellular and molecular biology. In the next semester students will explore genetics, evolution and ecology. In their second year, students will explore human anatomy and physiology. The course is experiment based and students will learn many basic practical laboratory skills that will prepare them for university. Students will have a strong foundation in the basic topics that encompass biology. The programme gives a holistic view of biology.

- SCIENCES -

2. CHEMISTRY

What is it about?
Chemistry will cover core topics including:
- stoichiometric relationships
- atomic structure
- periodicity
- chemical bonding & structure
- energetics/thermochemistry
- chemical kinetics
- acids and bases
- redox processes
- organic chemistry

These topics meet the requirements of the Indonesian national curriculum. Additional topics will be covered regarding UNAS as needed. The class is based on experimental practices and students will learn the basic skills for entry level into a university science class. Inquiry is essential to the class.

Recommended Prerequisites
It is recommended that students achieve an overall 5 in MYP Science to take Chemistry.

Why Study this Subject?
Chemistry is an essential science. There are many opportunities for chemists to work in industry and medicine. Drug production often comes down to hiring the right chemist and manufacturing is greatly improved by a good chemist. Sustainability is an important and growing concern for many companies and companies are always looking for new and improved ways to use materials and polymers in new and interesting ways to reduce waste, reuse old material or find alternatives. Chemistry is an excellent choice in university especially if you double major in biology or physics.

3. PHYSICS

What is it about?
The physics programme introduces the students to a wide variety of topics within Physics. The class is designed to give the student experiences with the many different fields within physics from waves, mechanical, atomic, electrical or quantum physics. The class is based on experimental practices and students will learn the basic skills for entry level into a university science class. Inquiry is essential to the class.
SUBJECTS

Core Topics:
- Measurements & uncertainties
- Mechanics
- Thermal Physics
- Waves
- Electricity & magnetism
- Circular motion & gravitation
- Atomic, nuclear & particle physics
- Energy Production
- Wave Phenomena
- Fields
- Electromagnetic induction
- Quantum & nuclear physics
- Relativity
- Fluid Dynamics
- Thermodynamics

Why Study this Subject?
In the last decade, Physics has been given a new life. Examples of physics in practice is research done at the Large Hadron Collider and rocket companies like SpaceX. 20 years ago, going to space was not a private venture but left alone for governments and government spending. However, today there are private companies building rockets and pioneering new and improved ways. The first photo of a black hole was in 2019 and that took the collaboration of facilities all around the world to make a composite image. Physics is also very well integrated with robotics and biology. Biophysicists are in high demand. A university degree in physics will open many doors for students.
A CENTRE OF EXCELLENCE FOR EDUCATION IN INDONESIA

SEKOLAH CIPUTRA
Puri Widya Kencana - Citraland, Surabaya
East Java, Indonesia 60213
+62 31 7415017 - 18
info-sc@sekolahciputra.sch.id
www.sekolahciputra.sch.id