Cambridge Assessment International Education

Cambridge International School

WENTWORTH COLLEGE

# 2021 Curriculum Booklet

# WENTWORTH COLLEGE

# COURSE OPTIONS

# FOR

# YEAR 10

# 2021

# Selecting your IGCSE Course

The aim of this booklet is to inform students and parents of the IGCSE (International General Certificate of Secondary Education) subjects which are offered for study at Wentworth College.

The information given outlines the course syllabus, course content and assessment modes.

The IGCSE curriculum is designed for international use and encourages students not only to acquire knowledge but also to:

a) Use an exploratory approach to problem solving
b) Have confidence in their ability to solve problems
c) Apply skills, knowledge and understanding
d) Undertake individual projects and work as a team
e) Develop oral and practical skills.

IGCSE provides a broad knowledge base and learning skills that are excellent preparation for further study and groundwork for employment.

Cambridge Assessment International Education (CAIE) examinations are sat by over 2 million students each year in nearly 170 countries. The inclusion of New Zealand content reinforces the quality of the qualification.

**Assessments**

IGCSE examination sessions occur twice a year: May/June and October/November. Results are issued in August and January respectively.

As a skills-based curriculum, IGCSE uses a wide range of assessment processes and techniques to complement formal written examinations; oral, practical, and project work are all used in various contexts.

In some IGCSE subjects there are two course levels – Core Curriculum and Extended Curriculum. The Extended Curriculum offers a more challenging course for students who achieve highly in the subject. If you sit Extended examinations you can gain A*, A, B, C, D and E grades. If you sit Core Curriculum you can gain C, D, E, F and G grades. Most students will attempt the Extended course.

# Cambridge Assessment Scale

Cambridge Assessment International Education (CAIE) use an eight-point grade scale. New Zealand students will receive a percentage mark and a grade.

| GRADE BOUNDARIES | |
|---|---|
| **GRADE** | **IGCSE %** |
| **A*** | **90 – 100%** |
| **A** | **80 – 89%** |
| **B** | **70 – 79%** |
| **C** | **60 – 69%** |
| **D** | **50 – 59%** |
| **E** | **40 – 49%** |
| **F** | **30 – 39%** |
| **G** | **20 – 29%** |

# Subject Option Selection

**General guidelines:**
At Year 10 it is best for students to maintain a broad range of subjects and to avoid specialising too early.

Compulsory subjects – Year 10:
- English Literature
- Mathematics
- Combined Science* (Biology, Physics, Chemistry – 1 x IGCSE paper)

*This course may be assessed externally through Cambridge examinations at the end of 2021 if a candidate so desires. In Year 11 (2022), students may elect to take one (or two) out of IGCSE Biology, IGCSE Chemistry and/or IGCSE Physics.

Students are asked to select **one** subject from each option line below:

- Option A: Computer Science **or** Art & Design **or** Physical Education
- Option B: Music **or** Geography **or** Economics
- Option C: Design & Technology **or** History

**Background Information for Specific Subjects:**
At Wentworth, IGCSE is taught as a 2 year course commencing in Year 10 with students sitting their IGCSE examinations at the end of their Year 11 studies in 2022. This applies to all subjects except the sciences. IGCSE Combined Science is taught in Year 10, and IGCSE Physics, IGCSE Biology and IGCSE Chemistry are taught in Year 11.

Students are encouraged to discuss any concerns or queries with their subject teachers or Mr Lee. They should then complete the Option Selection Sheet and return it to Mrs Drew in the Student Support office.

# SYNOPSIS OF COURSE CONTENT

## COMPULSORY SUBJECTS

These courses set the foundation for IGCSE examinations in Year 11.

### ➢ English Literature (Taught over Years 10 and 11)

Through the study of literature students are encouraged to read, interpret and evaluate literary texts. They will learn to recognise and appreciate the ways in which writers use language to achieve their effects, and to communicate an informed personal response. Students will be encouraged to develop an enjoyment of reading literature and to appreciate its contribution to aesthetic and imaginative growth.

The study of literature enables students to explore areas of universal human concern, thus leading to a greater understanding of themselves and others.

**Assessment:**
Coursework 25%
Examination 75% -1x Drama exam (25%) and 1x Prose/Poetry exam (50%)

### ➢ Mathematics (Taught over Years 10 and 11)

Students will be encouraged to develop their mathematical knowledge and skills in a way which builds confidence and provides satisfaction and enjoyment. They will develop a feel for numbers and for patterns and relationships in Mathematics. There will be a strong emphasis on applying Mathematics to everyday situations, as well as solving problems and presenting and interpreting results. Students will be encouraged to communicate clearly and reason logically, using mathematical concepts. The Mathematics syllabus aims to encourage students to make use of Mathematics in their other subjects and to provide a firm foundation for the study of Mathematics and other disciplines.

At the end of Year 11, the students will sit either IGCSE Core or Extended Mathematics. There are 2 papers for each, one short (35%) and one has longer questions (75%).

## ➢ **Combined Science** (Taught in Year 10)

Combined Science is a course which delivers a well-rounded exploration of aspects relating to Biology, Chemistry and Physics. The course is designed to be accessible to all students and will provide a general understanding of scientific principles. Further, it will prepare the groundwork for future studies in the individual IGCSE sciences that will be taught in Year 11.

As well as a subject focus, the Cambridge IGCSE Combined Science syllabus encourages learners to develop:

- a better understanding of the technological world, with an informed interest in scientific matters
- a recognition of the usefulness (and limitations) of scientific method, and how to apply this to other disciplines and in everyday life
- relevant attitudes, such as a concern for accuracy and precision, objectivity, integrity, enquiry, initiative and inventiveness
- an interest in, and care for, the environment
- a better understanding of the influence and limitations placed on scientific study by society, economy, technology, ethics, the community and the environment
- an understanding of the scientific skills essential for both further study and everyday life.

Students will be able to sit the IGCSE Combined Science examination at the end of Year 10 if they wish (optional). This is assessed through a 100% external written examination.

In Year 11 (2022) the students will choose one or more out of IGCSE Physics, IGCSE Biology and IGCSE Chemistry.

# SUBJECT OPTIONS

## OPTION A: Choose one of the following

Computer Science

OR Art & Design

OR Physical Education

## ➢ Computer Science

Computer Science is the study of the foundational principles and practices of computation and computational thinking, and their application in the design and development of computer systems. Learning computational thinking involves learning to program because this is the means by which computational thinking is expressed.

Pupils doing this course develop an interest in computing and gain confidence in computational thinking and programming. They develop their understanding of the main principles of problem-solving using computers and apply their understanding to develop computer-based solutions to problems using algorithms and a high-level programming language. Pupils also develop a range of technical skills, the ability to test effectively and to evaluate computing solutions.

The Year 10 Computer Science class is the first year of the two-year IGCSE in Computer Science.

**The purpose of the course is to:**

- Develop computational thinking
- Develop an understanding of the main principles of solving problems by using computers
- Develop understanding that every computer system is made up of sub-systems, which in turn can consist of further sub-systems
- Develop an understanding of the component parts of computer systems and how they interrelate, including: software, data, hardware, communications and people
- Acquire the skills necessary to apply this understanding to develop computer-based solutions to problems using a high-level programming language.

**Equipment Requirements:**

Pupils may bring a laptop computer, however, this is not compulsory. If so, it must have Microsoft Windows, OSX or Linux as an operating system. Small, tablet-style computers, such as iPads or smart phones, are not sufficient. Any laptop purchased in the last few years should be suitable for the course. Some software will need to be installed on the laptop but this is freely available from the Internet and can be installed when necessary. The official Cambridge text book is required: *Cambridge IGCSE Computer Science Coursebook* by Sarah Lawrey & Donald Scott. (Some second hand books may be available.)

**Assessment:** 2 external written examinations

**Or**

## ➢ Art & Design

IGCSE Art & Design has 2 components – coursework (50% weighting) and an examination (50% weighting).

Art and Design is especially concerned with the development of ideas and visual interpretation and aesthetics. Students communicate their intentions and resolve issues via research and experimentation. The core thinking skills that develop in conjunction with the technical abilities are skills that are transferable to a wide range of disciplines where problem solving and higher order thinking is complemented by creative approaches.

In the first two Terms of 2021 students will refine their skills across a broad range of media in both fine arts and design. At the beginning of Term 3, the students will specialise in either Graphic Communication or Painting and related media.

There is a cost of approximately $50 for an art kit consisting of an A3 workbook and basic drawing and presentation equipment. Painting students will need quality brushes and quality acrylic paints which can be purchased through the Art Department. Students will need access to a laptop and a subscription to Photoshop (approximately $20 per month). Those who choose Textiles may have to source and purchase a range of individual fabrics or craft materials depending on the techniques they choose.

**Course content:**

Students will -

- create a visual diary showing exploration and development of design ideas through experimentation and research
- strengthen their painting and illustration skills and ability to control wet and dry media, with an extra option to learn fashion illustration techniques and a brief introduction to textiles
- learn how to analyse and draw inspiration from both traditional and contemporary artist models and research different movements in art
- generate ideas and develop a character design, create a scene and setting for the character's story, and learn how to translate these into a digital format
- become familiar with Photoshop and how to use it to develop and communicate ideas
- learn about the history of typography and design their own fonts
- learn how to control type, image and spatial elements through a sequential process of evaluation, refinement and regeneration of ideas and concepts
- create a folio of work consisting of 4 x A2 boards (up to 8 sides) and a finished piece of work for coursework
- complete and prepare boards in readiness for the examination where students will create a final piece of work in answer to their chosen question

**Or**

## ➢ Physical Education

This course provides students with an excellent opportunity to study both the practical and theoretical aspects of Physical Education and should foster a life-long enjoyment of sport and physical activity.

Half of the course is internally assessed and based on a student's own performance in a variety of sports. A student can be assessed in any of the following sports (Four to be selected across at least 2 categories)

| Categories | Potential Sports/Activities that can be used for assessment |
|---|---|
| **Games** | Football, Badminton, Baseball **or** Rounders **or** Softball, Basketball, Cricket, Golf, Handball, Hockey, Lacrosse, Netball, Rugby League **or** Rugby union, Squash, Table Tennis, Tennis, Volleyball |
| **Gymnastic Activities** | Artistic Gymnastics (floor and vault) **or** Rhythmic Gymnastics, Individual figure skating, Trampolining |
| **Dance** | Various styles - Education, Folk, Historical, Social, Theatrical |
| **Athletic Activities** | Cross-Country running, Cycling, Rowing and Sculling, Track & Field Athletics, Weight Training for fitness |
| **Outdoor & Adventurous Activities** | Canoeing, Hill walking **or** Orienteering, Horse Riding, Mountain Biking, Rock Climbing, Sailing, Skiing **or** Snowboarding, Windsurfing |
| **Swimming** | Competitive swimming, Life saving **or** Personal Survival, Water Polo |
| **Combat Activities** | Judo **or** Taekwondo |

The other half of the course will give students insight into different factors affecting sporting performance. Four units will be covered and students assessed in an external examination of these topics. The units and content that will be studied include:

| Units of Work | Curriculum Content |
|---|---|
| **Anatomy & Physiology** | Skeletal & Muscular System, Respiratory System, Circulatory System, Energy Systems, Simple Biomechanics. |
| **Health, Fitness & Training** | Health & Well-Being, Fitness, Diet & Nutrition, Principles and Methods of Training |
| **Skill Acquisition & Psychology** | Skill and Ability, Stages of Learning, Feedback, Relaxation Techniques, Coaching |
| **Social, Cultural & Ethical Influences** | Leisure & Recreation, Sports Development Pyramid, Sponsorship, Media influence on sport, Global sporting events, Sport Accessibility. |

Assessed by 50% internal coursework and 50% external written examination.
With the combination of practical coursework and theoretical concepts, students should be in a strong position to achieve highly in the final IGCSE grading.
There may be a small cost for this course depending on the practical activities chosen. Students are encouraged to purchase a numbered, personalised Polo Shirt as part of their practical assessment, which is likely to cost $60.There is also a recommended text book to aid students with their learning, at a cost of $50 - available for purchase from Collins Publishers (a small number may be ordered in for direct purchase from the College).

| OPTION B: Choose one of the following |
|---|
| Music |
| OR Geography |
| OR Economics |

## ➢ Music

The Music syllabus enables students to develop their musical skills, knowledge and understanding through listening, composing and performance practice – all of which are supported by a general study of music theory and history. They will learn to listen analytically to music of different cultures, periods of musical history and more contemporary/popular genres. This course will provide the basis for an informed and lasting love and appreciation of music.
At IGCSE level, the external examination is 40% of the year's mark, with 30% being Performance, and 30% being Composition.

**Course Content:**

Music Literacy –

- Reading and writing staff notation
- Score reading with reference to elements such as pitch, rhythm, dynamics, tempo and performance directions
- Understanding harmony, chord progressions, structure and form

Listening -

- Survey and identification of Western European music of the Baroque, Classical, Romantic and 20th century style periods, including relevant instrumentation
- Survey and identification of a range of traditional music from cultures in countries on all the continents, including relevant instrumentation
- Knowledge and understanding of one prescribed work from the Western music repertoire

Composition -

- Use of musical elements, structures and other compositional devices to create compositions
- Create compositions for specified instruments and combine words and music into songs
- Becoming familiar with music publishing software, such as MuseScore

Performance -

- Technical proficiency on at least one (main) instrument; learning/playing of secondary instruments is encouraged
- Develop 2 solo performances on the main instrument at Grade 3 or 4 level;
- Perform as a member of an ensemble

**Or**

## ➢ Economics

Economics affects everyone in their daily lives whether it is buying a pie at the local dairy or borrowing money to buy a house. We investigate consumers and producers and why they behave the way they do. We also look at the government's influence on the economy. This involves developing basic economic models and applying them to real life situations to help us answer questions such as:

- Is the government or the market better at allocating resources to their best use?
- Why is the price of petrol so high?
- Why do women earn less (on average) than men?
- What are negative interest rates and how will this affect my savings?
- Why is the market value for Ed Sheeran concert tickets much higher than the face value printed on the ticket?
- Why are cigarettes and alcohol regarded as being under-priced in most societies?
- How will President Trump's tariffs affect people in the USA and China?

In the first Term of this course, the students will be taught a basic understanding of Accounting. From Term 2 onwards we begin the IGCSE Economics course.

It is important to have an eye on the future. Economics is a versatile subject that can form part of an Arts, Business or Commerce degree. It can also be taken as part of a conjoint degree e.g. many academic students study Engineering/Commerce.

This subject continues in Year 11 and provides a fine grounding for AS Economics or AS Business Studies in Year 12.

**Assessment**: Students will sit 2 written external papers:
Paper 1 – multi-choice (30%)
Paper 2 – structured questions (70%)

**Or**

## ➢ Geography

Students will be encouraged to develop a sense of place and an understanding of relative location on a local, regional and global scale. Through a study of the characteristics and distribution of a selection of contrasting physical and human environments, students will come to understand some of the processes which affect the development of these environments. They will gain an insight into the spatial effects of the ways in which people interact with each other and with their environments. Together with a wider understanding of different communities and culture throughout the world, students will come to appreciate the contrasting opportunities and constraints presented by different environments.

Learning in the classroom will be enhanced with fieldwork around the school and an overnight trip each year.

**Course Content:**

<u>Human Geography</u>

- Population dynamics
- Migration
- Settlement development

<u>The Natural Environment</u>

- Rivers and Coasts
- Plate tectonics (earthquakes & volcanoes)
- Weather and Climate
- Interaction between Physical and Human Geography

**Assessment**: Students will sit 3 written external papers:
Paper 1 – Core Geography (46%)
Paper 2 – Skills (27.5%)
Paper 4 – Alternative to Coursework (27.5%)

## OPTION C: Choose one of the following

Design & Technology

OR History

## ➢ Design & Technology

The aims of the Cambridge Design & Technology syllabus are to enable candidates to develop:

- awareness, understanding and expertise in those areas of creative thinking which can be expressed and developed through investigation and research, planning, designing, making and evaluating, working with media, materials and tools
- the ability to solve practical and technological problems using processes of analysis, synthesis and realisation
- a range of communication skills which are central to design, making and evaluation
- a range of making skills using workshop tools and various materials
- the desire to relate their work to their personal interests and abilities by learning and experimenting with materials in practical areas
- improved technological awareness, attitudes of co-operation and social responsibility and abilities to enhance the quality of the environment
- the ability to make value judgements of an aesthetic, technical and economic nature

This Year 10 course is the introduction to IGCSE Design & Technology. Students will develop knowledge in Graphic Products and Product Design. This will be done through theory and practical work based around Design Units. The topic content is wide and interesting and focusses on the students' interests, whilst also allowing for the Cambridge Design & Technology syllabus to be taught.

**Assessment:**

Project – internally completed (50%)

External written examination (50%)

There will be a small cost for materials used in this course.

**Or**

## ➢ History

The easiest way to become a time traveller is to study History! Through this course, students have the opportunity to go back in time to discover the stories of individuals, people and societies in the past. As they learn about the major events and figures that shaped the twentieth century, students will gain an understanding of key historical concepts: cause and consequence, change and continuity, and similarity and difference. It is ensured that learners' knowledge is always rooted in an understanding of the nature and use of historical evidence as they analyse both textual and visual sources regularly throughout the course. By developing skills such as investigation, analysis, evaluation and communication, students who study History prepare themselves for future studies in the field of the Humanities, including subjects like Law, Politics and Sociology. Through learning about the past, students will find that they are able to better understand the world they live in today.

**Course Content:**

<u>The 20th century: International Relations since 1919</u>
The content focusses on the following Key Questions:
• Were the peace treaties of 1919–23 fair?
• To what extent was the League of Nations a success?
• Why had international peace collapsed by 1939?
• Who was to blame for the Cold War?
• How effectively did the USA contain the spread of Communism?
• How secure was the USSR's control over Eastern Europe, 1948–c.1989?
• Why did events in the Gulf matter, c.1970–2000?

In addition, we will study the following topic in depth:
Germany, 1918–45.

**Assessment:** Students will sit 3 written external papers:
Paper 1 – Core content and depth study (40%)
Paper 2 – Source material (33%)
Paper 4 – Essay on depth study (27%)