

# Thomas More College



**INFORMATION BOOKLET**

**SUBJECT CHOICES**

**FOR**

**GRADE 10: 2018**

## **INTRODUCTION AND IMPORTANT INFORMATION**

Throughout the first three phases of education, up to and including Grade 9, the pupils have been exposed to a wide area of subjects so that pupils can discover where their interests and abilities lie. From Grade 10 to Matric, each subject is studied in greater depth, so it is necessary that a certain amount of specialisation take place. The number of subjects taken is reduced to seven, which means that some choices must be made.

Grade 10 pupils in 2018 will follow the National Curriculum, continuing in Grades 11 and 12, and culminating in a National Senior Certificate (NSC) at the end of Grade 12. At Thomas More College, pupils will write the matric examinations that are set by the Independent Examinations Board (IEB).

A major feature of the curriculum is that there is **only one grade of study for all**. Higher Grade and Standard Grade have been abolished. Another feature is that all pupils have to do **Core Mathematics** or **Mathematical Literacy**, and all do **Life Orientation** as a formal subject.

The NSC promotes the skills of reading, writing and mathematical literacy. It encourages critical thinking and the bringing together of skills, knowledge, attitudes and values in the learning and teaching process. It also aims at developing people who are ready to participate fully and meaningfully in society.

## **SUBJECT CHOICES**

There is always a tendency among pupils to believe that certain subjects are 'more fun' and a 'soft option'! Only later do they realise that both aptitude and hard work are required. We feel that while parents must not make their children's choices for them, they must always act as a balancing, and perhaps sobering, influence on them.

A pupil will be required to choose no fewer than seven (7) subjects made up as follows:

### **Four Compulsory Subjects**

Home Language (English)  
First Additional Language (Zulu or Afrikaans)  
Core Mathematics or Mathematical Literacy  
Life Orientation

### **Three Choice Subjects**

Three additional chosen subjects, **one from each** of the following groupings:

#### **Group 1**

Physical Science  
History  
Life Science  
Geography  
Information Technology  
Dramatic Arts

#### **Group 2**

Physical Science  
Geography  
Dramatic Arts  
Engineering Graphics and Design  
Business Studies

#### **Group 3**

Life Science  
History  
Accounting  
Visual Arts  
Design Art  
Business Studies

**Note:**

1. The regulations stipulate that a pupil may change one or more subjects in his or her Grade 10 year. Any desired changes in Grade 11 will be more difficult to make, and will only occur in exceptional circumstances, or if it is in the best interests of the child. **No changes in Grade 12 will be permitted.**
2. Certain subjects will cater for a maximum of 26 pupils, based on ability, due to a single teacher, or group, in the discipline. These include EGD, Dramatic Arts, Visual Arts, Design or IT. These are allocated in consultation with teachers and parents and, if necessary, pupils.
3. Design will only be offered if there are enough pupils who select the respective subject. If the numbers selecting these subjects are too few, the parents of those pupils selecting the subject will be contacted and asked to select another subject.
4. **For a pupil to study Physical Science or Accounting, Core Mathematics is a requirement.**
5. In order to qualify for a university entrance, pupils have to achieve a minimum of:
  1. 50% in their home language (English)
  2. 50% in three other designated subjects
  3. 40% in the two other subjects
  4. Life Orientation: Pupils are required to pass Life Orientation; however, different universities and different faculties within each university have different requirements with regard to Life Orientation results.

Furthermore, each faculty at university has a sub–minimum number of points that applicants are required to meet. Different systems are applied e.g. one such system is the awarding of points for each symbol that the pupil achieves; 7 points for an “A”, 6 points for a “B”, 5 points for a “C” etc. In conjunction with the points achieved, most faculties also require for the pupils to have written the National Benchmarking Test (NBT) which is set for the universities, and written by the pupils in their matric year.

Although Design is offered as full school subject, it is not classified by the Education Department as a designated subject. Officially, Design will therefore not count towards a university entrance, but if the pupil gains entrance into university with their designated subjects, full points could be allocated for Design. Again, different universities and different faculties have a different approach to the non–designated subjects with some even treating them as fully designated subjects. Please read the attached brochure for the policies applied to these subjects by some of the major universities.

THE FOLLOWING IS A BRIEF SYNOPSIS OF CHOICE SUBJECTS TO ASSIST YOU IN YOUR DECISION

## 1. ACCOUNTING

Accounting focuses on processing and communicating financial information. It deals with logical, systematic and accurate selection of recording financial information as well as analyzing and interpreting financial and managerial reports.

### AIMS

The subject of accounting develops the pupils' knowledge, skills, values, attitudes and ability to make meaningful and informed personal and collaborative financial decisions in the economic and social environment.

### SKILLS NEEDED

- Pupils need to have a mathematical ability as Core Mathematics is now a requirement in order to study Accounting
- Pupils will need to be able to work in a logical and systematic manner
- Pupils need to work accurately, thoroughly and neatly
- Problem solving skills

### SKILLS LEARNED

- Collect, record and analyse financial information
- Present and communicate financial information
- Relate the skills learned to real life situations
- Organize and manage own finances and activities responsibly and effectively
- Identify and solve problems in a logical manner

### THE FUTURE

Pupils who have studied accounting at school will find bridging the gap to commerce subjects at tertiary institutions a lot less demanding. Extensive research has been done on pupils who have not studied accounting at school and it seems that they have a higher risk of dropping the courses as they are unable to cope with the demands. Such courses include B.Comm, B. Compt, Business Science etc. Accounting is a life skill that can be applied in any career path that one chooses.

## 2. ART / DESIGN

Pupils can do either:

Design or Visual Arts

### DESIGN

The subject Design instigates the responsible, ethical, sustainable and process-formulated response/solution to problems, needs and opportunities that are presented in our constantly changing world. The study of Design produces individuals, who are able to function in the creative career fields, but also develops skills that can be used in the fields of commerce, marketing and advertising, engineering and the built environment, social sciences and humanities. The study of Design also stimulates the development of discerning consumers with informed value judgments and creates responsible users of designed products. Through Design, learners are encouraged to demonstrate originality, creativity and imagination in devising practical and efficient design solutions, while developing attitudes that are empathetic to the needs of humankind, to self-sustainability and to holistic problem-solving.

### INTEGRATED APPROACH

- Design integrates theory and practice in a holistic process to produce two and three dimensional products that serve a purpose in real life contexts.
- Through the integration of research into the design process, **constructive thinking** is emphasised over factual retention. Knowledge arises from experience, making it easier to understand, remember and apply.

### QUALITIES REQUIRED:

- The learner must be creative with an ability to think laterally.
- The learner must be self-motivated, with a positive, disciplined attitude.
- An ability to meet deadlines.
- Must have an ability to draw.
- An ability to maintain consistent effort and persevere through challenges without giving up.

### VISUAL ARTS

The subject Visual Arts offers students a vibrant environment where they can study various aspects of the visual image and visual culture, from their creation to the way in which they are interpreted and used by society. Visual Art is a platform for the learners to develop their skills in both the practical and theoretical component of the subject.

The Visual Art theoretical component examines the history of Art from the Ancient through to the Conceptual with particular emphasis on visual literacy skills.

Visual Arts helps students equip themselves with the skills they need to develop their individual talents and allows them to grow as creative individuals in our ever expanding art and design world.

### QUALITIES REQUIRED:

- The learner must be creative with an ability to think laterally.
- The learner must be self-motivated, with a positive, disciplined attitude.
- An ability to meet deadlines.
- Must have an ability to draw.
- An ability to maintain consistent effort and persevere through challenges without giving up.
- An above average ability in English

### 3. **BUSINESS STUDIES**

#### AIMS

Studying Business Studies is the ticket to obtaining the expertise that is needed in today's competitive business world. Our aim is to produce informed, imaginative, participative, contributing and reflective business practitioners who can dynamically perform a range of interdependent business operations.

Pupils will acquire, and be able to apply, essential business knowledge, skills and principles, to productively and profitably conduct business in an ever changing environment.

#### TOPICS COVERED INCLUDE

The micro, market and macro environments

Contemporary socio-economic issues

Forms of ownership

Creative thinking and problem solving

Stress and crisis management

Professionalism and ethics

Entrepreneurship

Business functions – Marketing; Production; Human Resources; Finance

Industrial Relations

Corporate Social Responsibility

Insurance

Investment

#### CAREERS

The field of Business Studies includes a wealth of different goals and objectives. The choice is endless. Do you wish to study for a degree in Business Science, or a Diploma in Business Management, or Human Resources? Or maybe you are after a professional qualification in Labour Relations or Customer Relations. As well as being able to secure formal employment, pupils will be able to pursue sustainable entrepreneurial and self-employment career paths.

#### 4. **COMPUTERS**

Pupils can do either:

Information Technology (IT) or Computer Applications Technology (CAT)

##### **INFORMATION TECHNOLOGY (IT)**

Information Technology focuses on activities that deal with the solution of problems through logical thinking, information management and communication.

Information Technology will enable pupils to understand the principles of modern computing through the use of current programming language, hardware and software, and how these apply to their daily lives, to the world of work, and to their communities.

It involves the integration of theory such as hardware, software, networking and the social impact of computers and practice in the form of structured experiential learning of programming and databases. This affords pupils the opportunity to gain skills and knowledge as designers of software and managers of data networks.

The subject also provides orientation for further study in this field. Information Technology specifically forms a good basis for the programming components of Bachelor of Science degrees in general and specifically engineering and computer science. It also forms a good basis for studies in business sciences such as a Bachelor of Commerce in Information Systems.

##### **COMPULSORY REQUIREMENTS ARE**

- A modern home PC, preferably with internet access.

## 5. DRAMATIC ARTS

Speech is our chief means of expressing our thoughts and feelings and communicating with other people. Drama affords opportunities for invention and expression leading to a better understanding of human situations and behaviour.

### COURSE OUTCOMES

- Critical and Creative thinking
- Effective Teamwork
- Time Management
- Communication Skills
- Social Awareness
- Problem-solving

These Outcomes are achieved through participation in cultural and aesthetic contexts. Career and entrepreneurial opportunities are explored.

The pupil develops:

- moral awareness
- social responsibility
- creativity

In addition to this, the following personal skills are developed:

- self-esteem
- self-discipline
- self-confidence
- emotional intelligence

### SKILLS NEEDED

- a good command of language
- self-discipline
- commitment and passion for the Arts

### CAREERS

- Theatre
  - performance
  - management
  - design (costumes, set)
  - technical (lighting, sound)
- Advertising
- Human Resources
- Hotel Management and Hospitality
- Public Relations
- Education
- Fashion
- Radio and Television
- Film & Graphic Animation
- Law
- Politics



## **6. ENGINEERING GRAPHICS AND DESIGN**

EGD aims to develop the pupil's ability to address problems and exploit opportunities in a creative and innovative way. Pupils are equipped to apply cognitive skills, such as critical and creative thinking, analysis, synthesis and logic to practical, real life design and engineering problems.

This subject equips pupils with the skills, knowledge, attitudes and values to function in an engineering and design environment. It also stimulates an innovative and entrepreneurial spirit and enhances pupil's technological literacy. The pupil will thus be equipped to appreciate the interaction between peoples' values, society, environment, human rights and technology.

Application of the design process helps to solve Civil, Electrical and Mechanical problems analytically and graphically and to understand the concepts and knowledge used in Engineering Graphics and Design.

### **SKILLS COVERED**

Drawing skills covered involve the following disciplines:

- Instrument drawing according to scale (using a portable A3 drawing board)
- Freehand drawing
- CAD (Computer aided design). We use AutoCAD and Inventor

### **SCOPE**

EGD as a subject gives pupils the opportunity to:

- Communicate ideas graphically by employing drawing instruments and computer-based tools.
- Learn by solving problems in a creative way.
- Carry out practical projects and tasks using the process skills of investigating by means of meaningful research, designing, making, evaluating and communicating.
- Learn by dealing directly with human rights and social and environmental issues in their project work.
- Use and engage with knowledge in a purposeful way.
- Create more positive attitudes, perceptions and aspirations towards manufacturing, engineering and technology-based careers.

EGD includes but is not limited to:

- Applications of the principles of Mathematics, Physical Sciences, Computer Applications Technology and Life Sciences to manufacturing, engineering and technology problem solving.
- Conceptual design, synthesis and graphics.
- Conceptual knowledge, understanding and application of materials and processes in manufacturing and the built environment.
- Architectural, mechanical, structural, electrical and civil engineering.
- Enabling pupils to consider a range of technological solutions to problems, particularly those that are more sustainable and ones that are not detrimental to human health, well-being and the environment.

## 7. GEOGRAPHY

Modern Geography is no longer the “old” Geography of learning-by-heart countries, capitals and crops. The subject matter is now far more topical, challenging and pertinent to the modern world. Geography occupies a unique position in the school curriculum in that it incorporates and complements skills from all subjects especially Mathematics, History, Biology, Computer Applications Technology and Business Economics Students. Skills acquired in the study of Geography help form a good foundation for tertiary study.

Teaching of Geography now is conceptually based with the emphasis on pupil involvement in problem solving, decision-making and data analysis. The syllabus is wide ranging covering elements of physical and human geography and it utilises software and many resources available on the internet.

The study of Geography will help one to understand the environmental, social and political problems of one’s country far better. Geography is a broad-based subject that develops valuable knowledge and skills which may be directly applied or adapted for careers in Administration, Climatology, Education, Environmental Management, Information Management, Journalism, Planning (Rural & Urban), Remote Sensing, Research, Travel & Tourism, Cartography, Crime analyst, Disaster Planner, Statistician, Surveyor, Market Research Analyst, Geologist, Town Planner Engineer and many more.

## 8. HISTORY

History is perhaps the least understood of all subjects. It is a vibrant, skilled and divergent-thinking discipline. This equips a person for taking his/her place in society and develops a focused, critical problem-solving mind.

History is a skilled based subject which has value and usefulness in other subjects, and areas of life. It is a study of man, his thoughts and his actions. One major cry against History is that it has no relevance to the modern day. A clear answer to this is that **“Society has got to have human beings with a compassion for, and empathy for, their fellow men, something sadly lacking in our world today. Programmed human robots are not enough”** Another question people ask is what relevance History has in the work place? The answer is as follows **“History equips one for all-round thinking, speaking and writing skills that cover any jobs, occupation or profession”**

Consider the following:

### HISTORY IS FOR LEADERS

- Mr. Harry Oppenheimer, former Chairman of Anglo-America, looked for a study of Politics, Philosophy, Economics and History in those he employed.
- Mr. Clem Sunter recognizes the need for a study of History in entrepreneurs and business people
- The former CEO of Telkom is a History graduate
- The former CEO of Coca Cola is a History graduate.
- Who says you cannot get a job with History? Few are the Matrics who have taken History who have regretted it; and many are the past students who report how valuable it was in helping their present careers.

The study of history is the precursor, and initiator, of civilisation.

## 9. LIFE SCIENCE

Life Sciences is an exciting and dynamic subject that touches every aspect of our lives, from our health and behaviour patterns, to the challenging issues that confront us.

In Grades 10 to 12 Life Sciences builds upon the concepts and processes taught in Biology in Grades 8 and 9. The subject in the FET phase has a number of overlapping topics which are divided into four main strands.

1. Life at the molecular, cellular and tissue level explores themes such as biochemistry, genetics and the study of microorganisms.
2. Life processes in plants and an animal discovers the processes needed to stay alive and the structure of the various systems in living organisms.
3. Environmental studies teach about the interaction of living organisms with each other and their surroundings. This field of study is commonly referred to as Ecology.
4. Diversity, change and continuity look at how to classify living organisms and include the study of how living organisms have evolved from earlier forms.

Pupils need to be able to express themselves confidently in the written form in tests and examinations. Essay writing and research assignments are important components of the assessment syllabus. Practical work including doing and designing experiments, microscope work, biological drawings and field work forms a large component of the subject.

Life Sciences combines well with other subjects and it prepares pupils for modern life. The scientific way of thinking and handling problems is used effectively and is closely linked to Physical Science, Geography and Mathematics to a lesser degree. Pupils are required to problem solve, think critically and apply their knowledge.

Many careers need an understanding of Life Sciences. All careers linked to medicine, agriculture, bio-engineering, psychology, marine biology, education and forestry need Life Sciences directly. Many other careers such as engineering, law and science need an understanding of the subject.

## 10. PHYSICAL SCIENCE

### AIMS

The Science pupil is provided with a clear idea of the place of Physical Science in civilisation, and is prepared, through the subject content and discipline, for responsible citizenship. The subject is divided into two main components, namely Physics (laws of the universe and applied Maths) and Chemistry (the study of the Periodic Table and its elements). Essentially the pupils are being taught two subjects in one. At the end of their matric year, they are expected to write two, 3 hour examinations in which they are tested on content from grades 10, 11 and 12.

### SKILLS

Core Mathematics is essential as it is a requirement to study Physical Science.

Assessment involves a theoretical as well as practical component.

Pupils are given opportunities to make “discoveries”, learn measuring techniques, and practise the recording and treatment of observations, drawing conclusions, and the presentations of results. Analytical thinking plays an important role in the solving of problems. The pupils are tested using a variety of questioning levels. Namely: recall, comprehension, application, analysis, synthesis and evaluation.

To enjoy this subject a pupil must have an enquiring mind and a passion for problem solving. Listening in class and understanding what has been taught is essential for the application process that will follow after new content has been introduced. Application of laws and principles plays an integral role in the understanding of Physical Science.

### CAREERS

Physical Science is essential for further University studies in Medicine, Pharmacy, Radiology, and Agriculture, Pure Sciences and all Engineering fields; also Architecture and most University of Technology courses.