Subject Choices

A GUIDE TO SUBJECT SELECTION

HISTORY

1. Transferable skills

Studying History provides a student with skills which are not confined to the study of the past. Skills of analysis are invaluable in many jobs, and the ability to analyse and then prioritise information is vital to decision making. This not only provides a skill set for a student but it also keeps career options open.

2. History is relevant

There is a stigma attached to History that it is based entirely in the distant past, but this does not account for the huge amount of modern history which is studied in such depth. In order to make sense of current affairs it is important to study the past, as everything which is happening around us has been influenced by, and is a direct result of, that which preceded it. In this way, the study of History is explicitly relevant to us.

in a subject dominated by reading, students will develop self-sufficiency and become less dependent pupils.

6. Studying History provides cultural awareness

By looking at the history of different cultures, a History student can build up a better understanding of why certain peoples act the way they do. Looking at the history of the USA we can see why race tensions continued on past the abolition of slavery and arguably remain today. In reading the history of India we can see why the Caste system still remains in the subcontinent. By studying at the various tributaries of humanity, a broad cultural awareness is yours for the taking.

7. A History degree allows us to learn from the past

If you are to look at human history there are particular patterns which tend to repeat themselves. Whether it is the role of charismatic dictators like Caesar through to Hitler, or the significance of Religion in human conflict, humans have an astounding habit of ignoring the obvious contributing factors which can lead to war and oppression. It is then the job of the Historian to identify where we have been going wrong, comment on it, and attempt to avoid it in the future.

Why Learn World History

World history is a subject that embraces all humanity, not just certain nations, ethnic groups, or civilizations. Why should schools ask teachers and students to investigate a subject that encompasses the whole world and its peoples? World History for Us All emphasizes three rationales for investigating the human past.

1. Knowing who we are

Study of world history is the broadest and most searching approach to the question of who we are as both individuals and members of groups. Exploring how humankind has changed since its hominid ancestors walked the earth is the best way to grapple with the question of what makes us special, in fact, unique, in relation to other living species. National history teaches us what is distinctive about a particular land and people. World history throws light on the distinctive characteristics of human beings and how their thought, behavior, and interactions have changed over time.

The National Standards for History remind us:

Historical memory is the key to self-identity, to seeing one's place in the stream of time, and one's connectedness with all of humankind. We are part of an ancient chain, and the long hand of the past is upon us—for good or ill—just as our hands will rest on our descendants for years to come. Denied knowledge of one's roots and of one's place in the great stream of human history, the individual is deprived of the fullest sense of self and of that sense of shared community on which one's fullest personal development as well as responsible citizenship depends.

In short, world history helps us think about what it means to be human and about the characteristics that all humans have in common.

2. Preparing to live in the world

World history helps prepare young people for college studies, international experience, and active participation in civic life. It helps get them ready for the roles they will inevitably play as citizens of both their country and the world. A "global citizen" is simply a national citizen who knows and cares about the history and contemporary affairs of all humankind, a person who can in some measure think, speak, and write about world issues and problems intelligently and confidently.

Most of us are generally aware of world interconnections and interdependence. We know that the internet allows people to trade stocks at blinding speed, that hundreds of millions of people simultaneously watch the Olympic Games, and that the threat of global warming requires cooperation among all governments. We know that we live in a border-crossing, migration-prone, multiple identity-taking world. Intelligently addressing today's world conditions, however, requires more than vague awareness of these realities. World history education helps us better understand how and why the world got to be the way it is. It gives attention to the histories of nations, civilizations, and other groups and the differences among them. But it particularly emphasizes the history, problems, and challenges that humans have shared simply because they are humans.

3. Attaining cultural literacy on a world scale

World history contributes to our cultural literacy. Human beings, unlike other species, have the gift of language, that is, symbolic thinking and communication. That means that humans also have what World History for Us All calls collective learning, the ability to learn from one another and to transmit knowledge from one generation to the next.

Communicating intelligently in any language, whether English, Spanish, or Vietnamese, requires that we share a common fund of knowledge, information, vocabulary, and conceptual tools. We need shared knowledge and understandings partly because we live in a world where people in specialized occupations and professions tend to use special words, terms, and concepts that "outsiders" do not understand.

Making world history a core subject in schools broadens the fund of knowledge that we all share. It helps us speak and write to one another in clearer and more intricate ways. This does not mean that world history courses should be exactly the same in every school district. But societies should aim for general agreement regarding the common stock of both world-scale knowledge and historical thinking skills that children ought to possess when they graduate from high school.

All past societies that we know of have had an endowment of collective knowledge. World history is shared knowledge that citizens, whatever their country of allegiance, need to function on our planet in the twenty-first century. The complexity of human interrelations today means that cultural literacy must be global in range and depth.

https://www.thecompleteuniversityguide.co.uk/courses/history/7-reasons-to-study-history/

GEOGRAPHY

Geography is the study of the world. It involves understanding both the natural world as well as the man made influences we have introduced into the picture. The study of geography involves both natural sciences, or the study of physical geography, and social sciences, or human geography. Seen in this light, the importance of this field of study is hard to overlook.

There are many compelling reasons why you should study geography. Here are ten of the top reasons.

1. You'll become more worldly

Geography provides you with a context in which you can understand the world around you better. This includes everything from natural phenomena, land distributions, populations, weather, migration, etc.

Studying geography is a little like putting all the pieces of a very difficult puzzle together; when you're done, everything clicks and you have one of those 'AHA!' moments.

2. There is a High Demand for Geography Majors

Geography majors are in high demand and there is currently a huge shortage in the number of applicants for these positions. That means that studying geography would open numerous doors for you in terms of employment.

In addition, jobs which are seeking geography majors typically involve a certain amount of travelling. These jobs are exciting and engaging, and are waiting to be applied for!

3. You'll Get to Dabble in a Variety of Subjects

One of the fantastic things about geography is that it merges together numerous different subjects under it's one head. You'll get to learn a little bit about everything from physics, biology, economics, sociology, politics, art, political science, chemistry, history, and more!

If you were ever worried about limiting yourself in terms of what you could study, you can put all those fears to rest if you choose to study geography.

4. You'll have a context for history

History isn't just a collection of past events; it has massive ramifications for the present and future. Like geography, history is a dynamic subject to study. Knowing geography helps to put the course of world history into perspective, and it helps us to understand it better.

For instance, understanding Britain's historical reach is only possible if you have a proper understanding of the factors which enabled them to accomplish what they did, including the geography of the land. The English Channel was instrumental in helping the British spread their power. Furthermore, decisions about wars and conquests were also influenced by various geographical factors.

With a sound understanding of geography, you'll better understand the events of the past and their significance.

5. Strengthen your navigation skills

One might argue that in the age of smartphones, is it really necessary to have a sound understanding of practical navigational skills? The short answer is yes. In many ways, the technologies which enable us are still limited. Furthermore, these technologies themselves have been influenced and created by the study of geography.

If you know geography, you can rest assured that you'll have better navigational skills than your phone. You also won't have to worry about getting lost if your phone runs out of battery.

6. You'll understand what's happening in the world

Globalization and the various events that are unfolding in the modern day world are all influenced by geography. That includes everything from the Syrian refugee crisis to the current political environment in Europe and the United States.

Context is everything and once again, geography provides the perspective you need to better understand what's happening around you.

7. Better equipped to deal with the challenges of the future

The study of geography influences every aspect of our world. The future is being shaped by a plethora of forces and to adequately face the challenges of the future, you'll be better off if you have knowledge of geography. Everything from politics, climate change, and business is being shaped by geographical factors.

8. Potential for earning more

The next couple of years are going to see a huge boom in jobs which are related to geography. The reason for that is quite simple: the vast majority of jobs require at least some component of the study of geography.

Your knowledge of geography will make you an asset in the job market and has the potential to increase your earning capabilities.

9. Better understanding of the physical world

One of the central aspects of geography is understanding the physical world. This knowledge will increase your understanding of things like natural disasters, climate, the water cycle, and more. The study of geography developed so as to help humans make better choices, which were influenced by an understanding of the physical world.

10. Appreciate the Cultural Diversity of the World

Different cultures all over the world are influenced by where they are located. Their precise location on the planet will determine the types of food, clothing, social structures and architecture, which is characteristic of that culture. Every facet of a culture is affected by its geographical location.

Knowing geography will help you to understand and appreciate the rich cultures of the world.

http://www.excite.com/education/blog/top-10-reasons-to-study-geography

LIFE SCIENCES

Careers in the Life Sciences

Information on careers in Life Sciences is available from the WU Career Center in the Danforth University Center (*http://www.careers.wustl.edu*). Many specific resources are listed here; in addition many professional societies can provide specific career information. Consult science journals published by professional societies for addresses of the societies. Information from most of the sources listed in this handbook is available in the Natural Sciences Learning Center.

- B.A. Level Positions in Biomedical Research
- B.A. Positions in Ecology
- Opportunities in Education
- Opportunities in Health
- Genetic Counseling
- Genetic Epidemiology
- Health Administration
- Occupational Therapy
- Pharmacy
- Physical Therapy
- Psychology
- Public Health
- Veterinary Medicine

https://wubio.wustl.edu/undergraduate/careers

Physical Sciences

Description

Physical sciences are concerned with the physical and chemical properties of objects, as opposed to the study of living things in the Life Sciences. We need to understand how the physical environment works so that we can benefit from it and care for it responsibly. Indigenous knowledge which communities have held for generations has been the source of many new scientific developments. Disciplines of the physical sciences include astronomy, geosciences, mathematics, materials science, meteorology, physics and chemistry.

Purpose

The Physical Sciences develop a range of skills, such as observing, measuring and comparing, designing and conducting experiments, interpreting and communicating results to

an audience, using and applying knowledge and laws to everyday circumstances and unique situations.

Should I take Physical Sciences?

If you are interested in Physics and Chemistry and you are good at Mathematics then take Physical Science. If you enjoy a challenge and you are considering entering a career in the engineering or scientific field, take Physical Science! Do not take Physical Science if you have no interest in Science, and you find it difficult to understand the concepts. If you find Mathematics difficult, then do not take Physical Science.

Careers

Engineering

Information Technology

Science and Mathematics

Health Sciences

https://www.gostudy.net/subject/physical-sciences

MATHS and PHYSICAL SCIENCE

You heard "Maths is important" but are you sure why? And what about Physical Science? Is that really needed?

Grade 10 to 12 Mathematics teachers hear this question more than any other question: "Where will I ever use this in my life?"

A physiotherapist who had to distinct in Mathematics at school level in order to be selected hardly ever use that Mathematics in practice. **WHY THEN DID HE OR SHE HAVE TO TAKE UP MATHEMATICS AS A SUBJECT? WHY DO UNIVERSITIES INSIST FOR SO MANY COURSES THAT MATHEMATICS IS REQUIRED?**

Mathematics Dual Nature

For us to understand why Mathematics is a requirement for high level careers even though its content is not directly used in those careers we have to look at the **dual nature** of the subject. When we study, for instance, Social Sciences, we study a subject with one nature: Social Sciences content.

But when we study Mathematics we study a subject with two natures: the content of Mathematics – that which is *not* used directly in a career like physiotherapy – AND the *frameworks* with which content (of any subject) is learnt – that which *is* used in a career like physiotherapy.

Academics refer to this second nature of Mathematics as **abstraction**. The subject requires abstract thinking, which is a schematic of generalized thinking that makes it possible for the

learner to learn *more* than Mathematics. Generalization is a skill that enables us to make conjectures by means of cross-comparing, all which will lead to rules and relationships that prove to be true in many differently applied content. So we may say that while 4+3=7 is a concrete simple principle that only teach us about the addition of 4+3, an example like a+b=c is a general conjecture that teaches us about the relationship between numbers' parts and their whole, also applicable in broader applications. This is exactly what Mathematical learning teaches us more than Mathematics only: to synthesize, analyze, generalize, compare, conclude, reason and therefore apply these advanced thinking skills into any other subject or career field in order to master that career more efficiently.

Now how about Science?

There is an unexplained link between Mathematics and Physical Science. No wonder, since Physics is like a sculpture of Maths (the theory) that finally takes on a recognizable form (the practical). And Chemistry is a manifestation of visible artistic array (the practical) corresponding with the geometry in Maths (the theory).
However, it is not to say that Physical Science is as such a requirement for a successful career. There are many people who are simply not interested into this subject field, and will not use it in their careers at all. Physical Science is not Mathematics, hence not the abstract thinking itself, but it is an applied form of Mathematics, and even though a fascinating one, still not one that should necessarily attract you.

When should you definitely take up Science as a subject?

The idea of this blog is not to give you a list of careers and information about them but rather to provoke stimulating ideas and questions in your own mind, where after you may google for further facts. The following key points can assist you in this process:

- Some University courses require for you to have completed Physical Science as a subject at matric level. If you found you haven't chosen the subject and it is "too late" then consider to do a bridge course at a University such as UNISA or other in order to scratch yourself up with your fellow students for the next year. Remember this: at University they start from scratch with Chemistry and Physics and hence you are not behind others!
- If you doubt your future choice and find yourself perform average to high in Physical Science, then keep the subject! It keeps your options open wider.
- If you doubt your future choice and start to struggle very hard with passing, then ask yourself why you struggle. Usually you know from within that you actually can and want to do it but for some reason you don't get your scores. In such a case it is important to find help from a professional after

school teacher, where there's not a mere repetition of school like large groups and the same conventional methods, but rather some form of help where you can receive personal monitor and alternative explanations. Practical illustrations of experiments and self exploration are key!

- Maybe you feel forced into this subject. It really doesn't interest you and even though you don't know what you'll study after school you definitely know you don't want to do *this*! In that case it is recommended that you leave the subject for another one since Physical Science takes up a lot of extra time that could have been devoted to subjects such as Mathematics or others.
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What can I do with a social science degree?

(SUBJECT CHOICES WOULD INCLUDE HISTORY / GEOGRAPHY / BUSINESS STUDIES)

Career options for social sciences graduates: jobs you can do with a degree in economics, geography, history, law, politics, psychology, sociology etc.

If you are graduating with a degree in social sciences, you may find there is a limited number of careers in which your subject is an essential requirement. However, there will be many areas in which your qualification can be an advantage.

Careers for social science graduates

Some of the areas employing social science graduates are:

- accountancy
- advertising/marketing
- banking and insurance
- business management
- economics
- local government
- management consultancy
- market research
- media
- politics
- psychology
- retail and sales
- teaching and lecturing
- tourism
- town planning.

Employability skills gained from a social science degree

It's been estimated that 40 per cent of graduate vacancies do not ask for specific degree subjects. And your degree will have helped you develop a range of transferable skills that you can bring to jobs unrelated to your subject. These include:

- analytical ability
- communication skills, verbal and in written reports
- data collection, analysis and interpretation
- numeracy and statistics
- problem solving
- project management
- quantitative and qualitative research
- team work.

Engineering Graphics & Design (EGD)

Engineering Graphics and Design (EGD) Career Opportunities

EGD provides the fundamental knowledge and drawing skills required for the following career opportunities:

- Architecture
- Most engineering fields (e.g. Civil, Mechanical, Aviation, Maritime, Agricultural, Mining, etc.)
- Medical technician
- Industrial designer
- Interior designer
- Landscape architect
- Quantity surveyor
- Building management
- City planner
- Land surveyor
- Teacher
- Graphic illustrator
- Jewellery designer
- Model builder (scale models)

- Draughtsperson (e.g. Steel structure, Architectural, Civil, Design, Electrical, etc.)
- Technicians
- Most manufacturers
- Most artisans
- CAD system operator

The Specific Aims of EGD are to Teach the Following:

- Graphical drawings as the primary means of communication in the technological world
- Specific basic content and concepts within the contexts of Mechanical Technology, Civil Technology and Electrical Technology
- Various instrument and freehand drawing techniques and skills
- Solving technological problems through graphical drawings
- The application of the Design Process
    - The implementation of CAD (Computer Aided Drawings/Design) as a drawing method.

What is Engineering Graphics and Design (EGD)

Engineering Graphics and Design (EGD) teaches internationally acknowledged principles that have both academic and technical applications. The emphasis in EGD is on teaching specific basic knowledge and various drawing techniques and skills so that the EGD learners will be able to interpret and produce drawings within the contexts of Mechanical Technology, Civil Technology and Electrical Technology.

The Main Topics of EGD:

- General drawing principles for all technological drawings
- Free-hand drawing
- Instrument drawing
- First- and third-angle orthographic projections
- Descriptive and solid geometry
- Mechanical working drawing

- Civil working drawing
- Isometric drawing
- Perspective drawing
- Electrical diagrams
- Interpenetrations and developments
- Loci of helixes, cams and mechanisms
- The Design Process
- CAD (Computer-Aided Drawing/Design).

Computer Applications Technology

Description

In the last decades, computers have become a normal part of life. They are used to send e-mails, write reports, manage our finances, or just to surf the internet. CAT is the study of the components of a computer system and how to use it to solve everyday problems. It will prepare you for life in the technological world. This is a very practical skills-based subject which will help you at university, college, and the work place.

Purpose

Computer Applications Technology aims at developing computing skills in the following packages: Word, Excel, Access, Explorer, Outlook and Power Point and basic HTML (webpage). Learners will be able to use the Internet, and understand the role that it plays, find relevant information, process it, make decisions, and learn how to use ICTs responsibly. A fairly high level of competency is expected.

Should I take this subject?

If you enjoy working with computers and its many applications, then CAT is a good subject to take. The great advantage of this subject is that it provides skills that can be applied immediately in the classroom and the workplace. Like all matric subjects, CAT will require consistent application and hard work. CAT is not a designated subject: this means that it cannot be used for determining university acceptance to university. CAT is however used in the calculation of Admission Points Scores (APS) at all universities and colleges.

Careers

Although CAT is not a compulsory subject for any particular field of study, this subject does provide you with a range of basic skills useful in the field of Information Technology should you wish to study in this field further one day. The ability to use computer applications efficiently is a distinct advantage in many fields. Students also complete the ICDL (International Computers Drivers Licence) course during Grade 10 and 11. Not only does this give them an excellent platform from which to do Grade 12 CAT, but is an asset on their CV.

Visual Arts
Description

Visual Arts covers a broad field of creative practice that involves the hand, the eye, the intellect and the imagination in conceptualising and creating two-dimensional and three-dimensional artworks, objects and environments which reflect the aesthetic, conceptual and expressive concerns of individuals or groups. Learners acquire the capacity to make practical and aesthetic decisions in the development of a coherent body of work. The subject Visual Arts is about self-expression and offers learners a way to engage meaningfully with, and respond to, their world. It provides opportunities to stimulate and develop learners' intellect, engaging their creative imagination through visual and tactile experiences and the innovative use of materials and technology in realising their ideas. It also encourages learners to develop an individual visual language and literacy, which is informed and shaped by the study of visual culture, past and present.

Should I take this subject?

If you are talented and enjoy the subject, then take it. There will be a large amount of theory to study too.

Careers

Read up in the Field of Visual Arts to find out more about careers within this field.

Applied and Visual Art

This field involves creative expression through drawing, sculpting, painting, photography etc. An artist is an especially talented person with the skill to visually express what they see and feel with accuracy, character, and feeling. An artist usually becomes known for one or few techniques, or styles of art. Over time these preferences become an artists' "signature", for which they become known. Independent artists create a market for their work over time. They prefer working independently without restrictions with regard to what they produce. In this way they express their thoughts freely in the art form of their choice, irrespective of the consumer. Commercial artists, on the other hand, work in a structured environment where they apply their artistic ability on request of a client in order to create or enhance a product directed at a specific consumer market. Commercial artists are able to channel their artistic ability into a commercial, saleable skill from which they earn a living.

Occupations

Advertising

Animator

Architecht

Architectural Metalworker / - Model maker / - Technologist

Art Editor and Critic

Art Historian

Art Therapist

Artist, Finishing Artist and Art Teacher

Body Make-Up Artist

Cartoonist

Clothing and Costume Designer

Craftsperson

Décor and Stage Scenery Designer

Desktop Publisher

Display Artist

Fashion Designer

Game Designer (Multimedia)

Goldsmith and Jeweller / Jewellery Designer

Graphic Designer

Interior Designer / -decorator

Photographer

Publisher

Signwriter

Special Effects Artist

Technical Illustrator

Tool Designer

Video and Film Editor

Webdesigner / Webmaster