AM SYLLABUS (2013)

HOME ECONOMICS AND HUMAN ECOLOGY

AM 18

SYLLABUS

Home Economics and Human Ecology AM 18 Syllabus

(Available in September)

Paper I (3 hours)+Paper II (3 hours)+Paper III (Coursework)

This syllabus provides an advanced course of study in Home Economics and Human Ecology, building upon knowledge and skills learnt within the Home Economics discipline at Secondary Education Certificate (SEC) level. It thus assumes a knowledge of Home Economics at a level equivalent to that defined by the SEC syllabus and attempts to extend and consolidate this knowledge base by integrating the essential principles of the field of study within a core section: *The Family, Home and Society* and *Food, Nutrition and Health*, together with coursework experience in a selection of Option Areas: *Food Technology, Child Development, Senior Members of Society, Hospitality Services* and *Textile Studies*.

The study of Home Economics and Human Ecology may lead to careers in the Hospitality, Food and Textile Industries, Paramedical and Caring Professions, Consumer Services, Education and other related careers.

1. AIMS

The aims listed below reflect the methodology to be adopted for teaching the subject. They highlight the knowledge, skills, attitudes and values required for the study of Home Economics and Human Ecology at Advanced Matriculation Level.

- To encourage an investigative approach to study and an ability to evaluate, manage and make economical, environment-friendly and safe use of resources.
- To develop the ability to make informed decisions.
- To provide experiences of problem-solving, research methodology and practical application when working to a design brief.
- To promote an awareness of design and develop aesthetic appreciation and creative skills
- To foster a sensitive, caring attitude that will lead to the identification and realisation of people's needs.
- To further the concern for the natural environment
- To create an awareness of the impact of rapidly changing technology on the family and society and to develop the skills required to efficiently manage this impact and related lifestyle changes.

2. ASSESSMENT OBJECTIVES

Candidates will be assessed for demonstrating:

- The knowledge, understanding and application of subject-specific information, principles and concepts relevant to Home Economics and Human Ecology.
- An awareness and understanding of contemporary issues, initiatives, current developments and their implications for Home Economics and Human Ecology.
- The use of investigative, experimental, managerial and manipulative techniques to gather, organise and present information, ideas, descriptions and arguments, clearly and logically, in order to reach justified decisions and conclusions
- The ability to appreciate critically the interdependence between creativity and aesthetic principles and identify and evaluate factors and relate them to specific needs
- To demonstrate aesthetic awareness, and be creative when communicating ideas and decisions

3. SCHEME OF ASSESSMENT

The examination will consist of three papers: Paper I and Paper II will be written examination papers and Paper III will comprise Coursework as outlined below.

Candidates must satisfy the Markers' Panel in <u>all</u> sections of the examination.

Paper I: The Family, Home and Society

This is a written examination paper of three hours duration. The maximum mark is 100 and will contribute to 37.5% of the overall mark of the examination.

Candidates are required to answer five out of six structured, essay-type questions.

Paper II: Food, Nutrition and Health

This is a written examination paper of three hours duration. The maximum mark is 100 and will contribute to 37.5% of the overall mark of the examination.

Candidates are required to answer five out of six structured essay-type questions.

Paper III: Coursework

The Coursework consists of Part i and Part ii and will contribute to 25% of the overall mark of the examination.

Part i. Food Study Task (5% of the total mark)

Candidates are required to carry out a Food Study Task focusing on one food commodity and comprised of

- a related experiment AND
- a food production task or culinary skill.

Guidelines for the Food Study Task are in Appendix I. This work will be assessed internally according to the Assessment Criteria for the Food Study (Appendix III).

Part ii. Investigation (20% of the total mark)

Candidates are required to submit <u>one</u> Investigation chosen from <u>one</u> of the Option Areas. Candidates are expected to use <u>two</u> different research techniques which are different from those used in the Food Study Task. Guidelines for the Investigation are in Appendix II. The Investigation will be assessed internally according to the Assessment Criteria for the Investigation (Appendix IV).

Further details for the Food Study Task and the Investigation are given in Section 7 of this syllabus.

The tutor's assessment for the Food Study Task and the Investigation must be completed and submitted to the MATSEC Examination Board by the date determined by the same Board, and is subject to moderation by the Markers' Panel.

4. GRADE DESCRIPTIONS

The following grade descriptors indicate the level of attainment characteristic of the given grade at Advanced Matriculation (AM) level. They give a general indication of the required learning outcomes at each specific grade. The descriptors should be interpreted in relation to the content outlined in the syllabus; they are not designed to define that content.

Grade A

Candidates demonstrate a very well developed ability to:

- Analyse and interpret social, scientific and technological concepts together with the recognition of the complex inter-relationships within the syllabus
- Apply knowledge, understanding and skills to different situations within a theoretical and practical context
- Select and organise material discriminately from a wide range of sources and use this to forward justified arguments, judgements, choices and conclusions use effective research methods to explore and develop ideas creatively and intuitively, to communicate ideas clearly and accurately in a concise, logical and relevant manner, and to critically evaluate outcomes.

Grade C

Candidates demonstrate a satisfactory ability to:

- Analyse and interpret a good range of social, scientific and technological concepts and show some recognition of the inter-relationships within the syllabus
- Apply knowledge, understanding and skills to a range of situations within a theoretical and practical context
- Select and organise material from a number of sources and use it to forward appropriate arguments, judgements, choices and conclusions
- Use different research methods to communicate ideas in a relevant manner and to adequately evaluate outcomes

Grade E

Candidates demonstrate a limited ability to:

- Analyse and interpret some social, scientific and technological concepts and show obvious recognition of the inter-relationships within the syllabus
- Apply basic knowledge, understanding and skills to a restricted range of situations within a theoretical and practical context
- Select and organise material from a limited number of sources and use it to forward arguments, judgements, choices and conclusions in a basic manner
- Use different research methods to communicate ideas and evaluate outcomes at a low level.

5. PRIVATE CANDIDATES

Private candidates are expected to refer to a Home Economics and Human Ecology tutor for supervision and guidance. Home Economics teachers who have taught Home Economics for at least five years since 1994 are also eligible as tutors for AM Home Economics and Human Ecology private candidates.

Guidelines for the Food Study Task and Investigation are in Appendices I and II and the Criteria for the Assessment of the Food Study Task and for the Investigation are in Appendices III and IV.

It is important that the candidate's particulars on the Mark Sheets for the Food Study Task and Investigation are duly completed (Appendix V and VI, respectively). The authentication by the supervising tutor is also required on each of above forms.

A declaration of authenticity by the candidate must also be completed for the Food Study Task and for the Investigation (Appendix VII).

Private candidates are to present their work for assessment by the markers' panel by the due date as instructed by the MATSEC office.

6. CORE SECTION (Papers I and II)

Paper 1 The Family, Home and Society

The integration of the content, through the consideration of the needs of people and the strategies for meeting these needs, provides the means by which this course should be approached. The themes of human development, health, safety, protection, efficiency, values, aesthetics and the individual's interaction with the environment, form the focus from which the study should develop in the context of an economically, socially and culturally changing society.

CONTENT

Individual, Family And Household Groups In Society

Concept		Expected Knowledge	<u>Amplification</u>
Family Units And Households	-	The changing nature of	- The concept of a family unit
		families and lifestyles	- Changes in the family unit
			structure (e.g. fewer offspring,
			one-parent family, adopting,
			fostering, mixed-race, young
			people moving away from home)
			and their implications for family
			lifestyle

Concept	Expected Knowledge	Amplification
Wellbeing Of Individual Family	Wellbeing of individual family	- Indicators of family quality of life
Members	members at different stages of	- Family-based strategies for
	the life-cycle and in different	promoting a good quality life
	circumstancesThe inter-relationship of paid	Efficient management of
	and unpaid work and leisure	- Efficient management of resources to contribute to smooth
	and the need to balance them	running of the family and to avoid
	for individual and family	stress and conflict among family
	wellbeing	members
	<u> </u>	- The management of the
		household: shared
		responsibilities, coping with
		different situations (working
		parents, short-term illness,
		chronic illness, disability, shared
		accommodation with relatives)
		- The implications of the success or otherwise of balancing paid and
		unpaid work and leisure time
		- The importance of pursuing a
		variety of leisure time activities
		for personal development and
		family quality of life
		- The concept of voluntary work
	 Poverty and social exclusion 	- Introduction to causes of, and
		remedies to, poverty and social
		exclusion [National Action Plan on Poverty And Social
		Exclusion]
Children's Wellbeing	■ The optimum physical, social,	- Key developmental stages with a
	emotional and intellectual	focus on physical, social,
	development of children ages	emotional and intellectual
	0-4 years	development
		- Providing a variety of experiences
		to promote children's holistic
		development to the maximum of their potential
		- The importance of play in a
		stimulating environment
		- The importance of social
		interaction both with immediate
		family members and with
		individuals and organisations
		outside the home (e.g.
		childminders, nurseries,
		kindergarten, schools and clubs) - Infant and childhood health and
		safety (e.g. basic needs,
		immunisation, a safe physical
		environment)
		- Support systems for children
		within the family
		- Provision and basic regulations
		regarding child care centres
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Concept	Expected Knowledge	<u>Amplification</u>
Children's Wellbeing cont.	Support services provided by	- Provisions of the welfare system
	the state and NGOs	including Children's
		Allowance, free medical services
		(immunisation, paediatrician,
		School Health Services),
		Child Care centres, Adoption and
		Foster Care Services, Disabled Child Allowance and support
		services for children provided by
		$APPO\dot{G}\dot{G}$ (to describe a max. of
		3 services)
		- The role and function of the office
		of the Commissioner for Children
Adolescents' Wellbeing	 Physical, social and emotional 	- Recognising and managing
	development	physical, social and emotional
	 Transition from adolescence to adulthood 	changes
	adultilood	- Peer pressure and conflicting values
		- Socialisation with different age
		groups
		- Gaining independence and
		becoming responsible adults
Adults' Wellbeing	 Responsibilities and rights of 	- Responsibilities towards children,
	adults	partners and elderly parents
		- Sharing family-related
		responsibilities within and outside the home
	 Support services provided by 	- Welfare benefits, allowances and
	the state and NGOs	services targeting adults,
		including their responsible use
		(ante- and post-natal classes,
		single-mother benefits, Sickness
		Allowance, Unemployment
		Allowance, ETC employment
		and training services, employment-related family
		friendly measures [maternity
		leave, parental leave, flexi-time,
		tele-working, job-sharing],
		lifelong/adult education courses
Elderly Wellbeing	The continuing physical,	- Preparation for and enjoying
	social, emotional and	retirement: making beneficial
	intellectual development of the	use of time, maintaining self
	elderly	esteem, managing financial issues
		- Maintaining a healthy and active lifestyle in the senior years
		- Participation within the family,
		local community and society
		- The role of grandparents in
		enhancing young families' and
		children's quality of life
		- Types and causes of elderly abuse
		and neglect and related remedies
		- Housing options for the elderly with a focus on the physical,
		financial and social aspects
		aspects

Concept	Expected Knowledge	<u>Amplification</u>
Elderly Wellbeing cont.	Support services provided by the state and NGOs	- Aspects of the welfare system related to the elderly (pensions, Home Help, Meals On Wheels, Handyman Service, Telecare, Kartanzjan, MMDNA, Free medication [pink and yellow cards], Day Centres, rehabilitation hospitals, University of the Third Age) - Support systems in the community (local parish groups, Local Councils, CARITAS)
Individuals And Families With Special Needs	 Different situations where special assistance is required for family wellbeing Support services provided by the state and NGOs 	 Individuals and families who may have special needs (family where breadwinner/s is/are unemployed, single parents, foster families, families where there is chronic illness) The definition and function of 'means testing' in relation to eligibility for welfare services and/or benefits Aspects of the welfare system related to special needs and circumstances (<i>Kummissjoni Persuni B'Diżabilita</i>, Transport for Disabled Persons [TDP], Blue Card [free parking place], Disability Allowance/Pension, <i>Aġenzija Sapport</i>) Community /NGO support services related to special needs and circumstances (Inspire, Arka Foundation, <i>Dar il-Kaptan</i>, <i>Id-Dar tal-Providenza</i>)
Substance Abuse Within The Family	 Family well-being and tobacco use and substance abuse in the family Prevention and support services provided by the state and NGOs 	 Physical and social health implications, and financial implications of tobacco use and alcohol use and abuse for users/ abusers and family members Awareness of the basic prevention and support services offerd by Aġenzija Appoġġ and Sedqa.
Influences on Individual And Family Lifestyles	The social, cultural, economic and technological influences on individual and family lifestyles The social, cultural, economic and technological influences on individual and family lifestyles	 The implications of the following factors for individual and family lifestyles: Social (shifting values and changes in family household structure) Cultural (mixed denominational marriages, inclusion of refugees and immigrants within the community, the impact of tourism and family holidays)

Concept	Expected Knowledge	<u>Amplification</u>
Influences on Individual And		- Economic (striving for a higher
Family Lifestyles cont.		standard of living, changing
		economic, domestic and child
		care roles of men and women,
		family members working or
		studying abroad)
		- Technological (the availability
		of new appliances, security
		services and household
		management strategies)
		- Leisure activities (greater
		variety in opportunities and
		facilities to use free time
		individually and as a family)

Habitat And The Environment

Concept		Expected Knowledge	Amplification
Factors That Affect The Choice Of A Home	•	Rationale for choice of locality and implications of choice	- The area chosen for setting up home (e.g. urban, village or countryside) and implications of such choice regarding privacy, space, accessibility to amenities, parking problems, air quality, proximity of green areas and open countryside
Different Types Of Living Accommodation	•	Different types of dwellings available locally	Basic advantages and disadvantages of living in an apartment, maisonette, terraced house, house of character, or farmhouse Renting or buying a home - advantages and disadvantages of the two different ways of acquiring a home with reference to the Maltese context
	-	Social Housing	- Definition and purposes of Social Housing (prevention of poverty [financial issues, social exclusion], provision of equity [individuals with special needs - disabilities, elderly, families with young children], improvement in quality of life [individuals with special needs - disabilities, elderly, families with young children,
	-	Identifying and accessing available housing	families with members with chronic illness, structural changes in bathrooms, kitchens]) - Sources of information on availability of property for purchase or rental - Advantages and disadvantages of using the different sources of information

Concept		Expected Knowledge	Amplification
Housing Needs	•	Suitable housing and layouts	- Basic housing needs of different
		for different stages of the life-	individuals, families and groups
		cycle, for different lifestyles	of people
		and for different personal and	- Different types of dwellings
		family circumstances	suitable for different lifestages
		Ž	(students, youth, young couples,
			young families and elderly
			persons), different lifestyles
			(persons who run a family
			business within the home, plus
			persons who work from home –
			office/desk-related; craft/hobbies-
			related; private tuition to small
			groups) and different
			circumstances (parent or sick
			relative moving in with family,
			family; family has a member who
			has special needs)
			- Strategies for making the best
			use of space available
			- Strategies to ensure accessibility
			of homes considering the needs of
			persons who are physically
			challenged and to meet specific
			circumstances in family lifestyles
			and lifestages, such as families who run a home-based business,
			or families with young children or
			elderly members
		Safety in the home	- The importance of safety in the
		Surety in the nome	design of living accommodation
			in relation to children, persons
			who are physically challenged and
			the elderly
	-	Security measures in the home	- Structural and design strategies,
			and installation of equipment to
			ensure security of the family
			home
Financial And Legal Aspects Of	•	Financial and economic	- Economic factors that influence
Acquiring Housing		considerations and legal	the type of home chosen
		processes in relation to	- Costs incurred when buying or
		obtaining a home	building a home (real estate agent
			fees, <i>sensarija</i> , notarial and
			lawyer's fees, stamp duty,
			different expenses incurred when
			buying shell versus finished
			property) - Ways of raising money for
			acquiring and finishing a home
			(e.g. bank home loans, short-term
			bank loans, borrowing from
			relatives)
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Concept	Expected Knowledge	<u>Amplification</u>
Financial And Legal Aspects Of Acquiring Housing cont. Environmental Issues And Protection	 Responsibilities of nations, industry and consumers 	- Short- and long-term implications of borrowing money (individual/couple has to keep on working [perhaps even when there are infants and young children in the family]; a 40 year loan might still be being paid up till you reach retirement age; potential source of stress if repayments not possible due to extraordinary circumstances) - Basic steps in the legal and formal process of buying a home - The meaning and functions of promise of sale (konvenju), contract, ground rent, (cens), home insurance, life insurance (Mortgage Protection Policy) - The importance of signing a lease in front of a notary when renting a home - Global concerns, such as global warming, the depletion of the ozone layer, acid rain, an
	towards the global natural environment Economic, aesthetic, environmental and health implications of pollution and related preventive measures	ozone layer, acid rain, an adequate supply of safe water and energy for all - Strategies which can be adopted on an international, national, family and personal level in order to deal with these problems - Basic definition and function of 'Environmental Impact Assessment' (i.e. assessing the impact of a physical structure on the quality of the natural environment and on the health [physical and social] of communities and individuals; to safeguard the quality and health of the natural environment and of communities and individuals) - Alternative forms of energy production and their impact at household and national levels: knowledge of various forms available internationally, but focus on more locally viable solar and wind energy, biomass and biogas (methane/landfill gas and biodiesel) - Basic advantages and disadvantages of solar water heating systems, photovoltaic panels, domestic wind turbines

Concept	Expected Knowledge	Amplification
Environmental Issues And		- Chemicals which contribute
Protection cont.		towards global warming and
		outdoor pollution (to name a
		max. of 2 from carbon dioxide,
		carbon monoxide, lead, sulphur
		dioxide nitrogen oxides,
		hydrocarbons, dioxins) and ways
		in which these can be reduced
		- Indoor pollutants (to name 1 of
		tobacco smoke, cleaning products)
		- Solid and liquid household waste
		disposal in Malta:
		- The function of water treatment
		plants (filtration to create
		second class water, water for
		irrigation)
		- Bring-in sites
		- Civic Amenity sites
		- Bulky refuse collection
		- Definition and purpose of
		engineered landfill
		- The impact of dumps and
		landfills (engineered and
		reclaimed quarries) on the
		environment and on the
		nation's health and economy
Sustainability And The	 Individual and family practices 	- Definition of sustainability
Conservation Of Natural Resources	that contribute towards the	- The role of the individual and the
And Energy	sustainability of the local and	family to conserve natural
	global environment.	resources, mainly non-renewable
		sources of energy, water, soil and
		limestone
		- The choice of goods and services
		which safeguard the natural
		environment, namely: goods and
		services which help save on
		energy and water, and/or are
		derived from sustainable sources
		(wood, paper, food)
		- Practising the traditional 3 Rs, -
Water Oreslites	= Campaga f mat 1.1.	Reduce, Reuse, Recycle
Water Quality	Sources of potable water and	- Sources and types of water
	ensuring a safe supply	available locally (tap, bottled,
		well water)
		- Safety issues (basic national regulations re water safety -
		chlorination, control of dissolved
		solids with particular reference to nitrates, sodium, chlorine, lead;
		ensuring safety within the
		home – securely covered water
		tanks; mains water for
		drinking/cooking);
		- In-home filtration (types of filters:
		filter jugs or domestic reverse
		osmosis units)
		osmosis units)

Management Of Resources

<u>Concept</u>	Expected Knowledge	<u>Amplification</u>
Consumer Behaviour	Factors which influence	- Personal influences: knowledge,
	consumer buying behaviour	ability, likes and dislikes,
		emotional factors, values
		- Social influences: gender, family
		roles, social status, cultural trends
		- Economic influences: income,
		price, interest charged for hire
		purchase, saving and borrowing
		patterns
		- Environment related influences:
		Considerations of impact on the
		environment of purchasing
		decisions (food, clothing, personal
		hygiene, transport)
		- Marketing and retailing
		influences: promotional strategies,
		such as targeted advertising, direct
		mail, in-store promotion,
		e-marketing; the changing nature
		of retailing, such as tele-shopping,
		online shopping
Consumer information	• Sources, regulation and use of	- Types of, and advantages and
	different forms of consumer	disadvantages of, sources of
	information	information about goods and
		services: to include the mass
		media, online sources, printed
		material, family members, friends
		and sales personnel
		- Legislation regarding types of
		labelling of goods and services (food labelling, textile labelling,
		eco-labelling [recycled/
		recyclability labels, green dot,
		energy label on electric
		appliances, EU eco-label], EC
		safety label): what should be
		included on packaging and
		labelling; understanding and
		interpreting this information
		- Features of misleading advertising
		and the role of the Consumer and
		Competition Division to regulate
		such type of advertising
		- The critical evaluation of advice
		and information on goods and
		making comparisons re toiletries
		and detergents, electrical
		appliances, clothing and toys
		- Criteria for choosing different
		home appliances; assessing
		suitability for family needs

Concept	Expected Knowledge	<u>Amplification</u>
Financial Management	■ The family income	- Definitions of gross income,
	 Types, functions and implications of saving, investing, borrowing, credit and debt 	disposable income, non-wage income - Budgeting to suit different lifestages (teenagers, engaged couples, young families, families with older schoolchildren, families at pre-retirement, elderly couple, elderly individual) and situations (chronic/serious health problems, illness; single parenthood; unemployment) - Sources of financial advice for saving, investing, borrowing, credit and debt (commercial banks, MFSA, private companies) - Uses and limitations of saving and investing options to include key factors, such as long- and short-term costs, flexibility, risk and protection
	 Types and functions of different insurances 	 Uses and limitations of a range of credit (borrowing) options currently available locally and their suitability for individuals and families at different lifestages. Causes and implications of running into debt and living on credit Different types of insurances (buildings and contents, car, health) and their use for individuals and families in different lifestages or having certain lifestyles The function of life insurance versus life assurance policies
Shopping Venues And Purchasing Methods	Traditional and modern ways of purchasing goods	- Advantages and disadvantages for different family members, different groups of people and different family lifestyles of traditional versus modern methods of purchasing (e.g. online shopping, tele-shopping, mailorder, chain stores, hypermarkets, shopping malls) - Consumer rights in doorstep and distance shopping (e.g. delivery
	Different ways of paying for goods and services	period, cooling down period) - Methods of payment and financial transactions: e.g. cash, debit cards, credit cards (including function of chip and pin), store/loyalty cards, pre-paid cards, tele-banking, internet banking - Function of EPOS and bar codes - Basic features of secure electronic transactions

Concept	Expected Knowledge	<u>Amplification</u>
Consumer Rights And	 Local regulations concerning 	- Knowledge of consumer rights
Responsibilities	the purchase and use of goods	and responsibilities.
	and services.	- Legal and Commercial
		guarantees
		- Methods of redress when
		problems arise (with retailer or
		service provider in person, over
		the phone, or via a letter; through
		the Consumer and Competition
		Division; through special
		service/column offered by local
		newspapers
	 Local statutory bodies and 	- The function of the Consumer
	organisations which safeguard	Claims Tribunal, Consumer
	consumers rights	Association, and European
		Consumer Centre (ECC)

Paper 2 Food, Nutrition and Health

Food, nutrition and health are a closely related field of study. The study should integrate nutrition and food technology within the historical, social, economic, and scientific perspectives and through these develop an understanding of their application to modern society.

CONTENT

Nutrition

Concept	Expected Knowledge	Amplification
Protein	 The basic chemical elements and physical structure of proteins Amino acids as the final products of digestion Essential/indispensable and non-essential/dispensable amino acids 	 Chemical elements and physical structure (chains of amino acids; fibrous and globular proteins) Some examples of proteins in the body Three examples of essential/indispensable and non-essential/dispensable amino acids, including histidine as the amino acid essential for children The need for adequate daily intake of essential/indispensable amino acids
	 The biological value of protein The complementary effect of plant proteins The properties and digestion of proteins 	 Examples of foods of high and low biological value Soya protein as an alternative high biological value protein Examples of the complementary effect of plant protein foods Properties of proteins The changes that occur to the structure of protein during preparation and cooking of food The digestion and metabolism of
Carbohydrates	The basic chemical elements and physical structure of carbohydrates	Proteins - Chemical elements and physical structure (simple diagram of a glucose unit and conversion of monosaccharides to disaccharides)

Expected Knowledge	<u>Amplification</u>
 Classification and food sources 	- Food sources of different
carbohydrates: sugars, starches and fibre/non-starchy polysaccharides (NSP) The relationship between monosaccharides, disaccharides and	- Explaining the formation of disaccharides and polysaccharides from monosaccharides
■ The function of carbohydrates	 Monosaccharides as end products of digestion The contribution of each type of carbohydrate to health Carbohydrates as the optimal source of energy Recommended daily fibre intake Impact of over-consumption of different types of carbohydrates The effects of fibre/NSP on the digestive tract The health implication of diets low in fibre/NSP
 The properties and digestion of carbohydrates 	Properties of sugars and starches The changes that occur to the structure of carbohydrates during preparation and cooking of food The digestion and metabolism of carbohydrates
 The basic chemical elements and physical structure of fats Classification of lipids – fats and oils, cholesterol, lecithin The main types of fatty acids Hydrogenated oils and trans and cis fats 	- Chemical elements and physical structure (fat as being composed of glycerol plus 3 fatty acids; saturated, unsaturated, polyunsaturated, trans and cis fatty acids; omega 3 and omega 6 fatty acids [including simple diagrams of each of these fatty acids]) - Basic description of hydrogenated oils and trans and cis fats - Fatty acids as the end products of digestion
 The main sources of dietary fats The value of lipids in the diet (including cholesterol and omega fatty acids) 	 Food sources of the different lipids Lipids as a concentrated source of energy; potential role in obesity, heart health and cancer Action of lipids in the body, with particular focus on arterial health; the role of cholesterol in relation to heart health (the function of HDL- and LDL-cholesterol) The benefits of omega 3 and omega 6 with respect to heart disease risk prevention
	of the main groups of carbohydrates: sugars, starches and fibre/non-starchy polysaccharides (NSP) The relationship between monosaccharides, disaccharides and polysaccharides The function of carbohydrates The function of carbohydrates The basic chemical elements and physical structure of fats and oils, cholesterol, lecithin The main types of fatty acids Hydrogenated oils and trans and cis fats The value of lipids in the diet (including cholesterol and

Concept	Expected Knowledge	<u>Amplification</u>
Lipids cont.	 Properties and digestion of lipids 	 The changes that occur to the structure of lipids during cooking of food The digestion and metabolism of lipids
	 The modification of fat intake in accordance with the dietary guidelines 	- Methods of modifying the use and intake of dietary lipids to reduce the risk of dietary-related disorders and diseases
Vitamins	 Definition, scientific names, classification and properties of Vitamins 	 Fat soluble: A – beta-carotene, retinol; , D – cholecalciferol; E – tocopherol; K - phylliquinone Water soluble: B₁ – thiamin; B₂ – riboflavin; B₃ - niacin; B₆ – pyridoxine; B₉ - folic acid/folate/folacin; B₁₂ – cobalamin; C – ascorbic acid Properties of fat-soluble versus water-soluble vitamins
	 The main sources and functions of vitamins 	 Common sources of the different vitamins Main functions of the different vitamins
	 Recommended intake of specific vitamins for certain population groups according to National Dietary Guidelines and Nutrient goals and WHO CINDI recommendations The effect of insufficient and excessive intakes of vitamins 	 Individuals and groups who have particular vitamin needs Recommended nutrient intakes: Vitamin C for children, adults, pregnant mothers; folic acid for pregnant mothers The effects of low and high intakes of vitamins on different population groups (focus on vitamins A, C, D) The importance of taking dietary sources of vitamins The role of vitamin supplements and ensuring a safe intake
	 Changes that occur during the preparation, cooking and serving of foods rich in vitamins 	- External conditions (storage, preparation and processing of foods) affecting vitamin stability and the methods used to ensure maximum retention and availability of fat-soluble and water-soluble vitamins
Minerals	Functions and main food sources of key minerals including trace elements Descriptions and main food sources of key minerals including trace elements	- The functions and common food sources of calcium, potassium, phosphorus, sodium, magnesium, iron, zinc, iodine and fluoride.
	 Recommended intake of specific minerals for certain population groups according to National Dietary Guidelines and Nutrient goals and WHO CINDI recommendations 	 Recommended intakes of calcium for children, teenagers and pregnant and lactating mothers Recommended intakes of iron for male and female adults and for pregnant mothers Recommended maximum intake of salt (sodium chloride) and of sodium for adults and children

Concept	Expected Knowledge	<u>Amplification</u>
Minerals cont.	 Mineral requirements by 	- Population groups who require
	different population groups	higher intakes of iron (women,
		growing children, adolescents
		and the elderly)
		- Population groups who require
		higher intakes of calcium
		(children and adolescents,
		pregnant and lactating mothers)
		- Population groups who require
		higher (labourers, hot countries)
	- TF1 - CC - 4 - C - 1	and lower intakes of sodium
	The effects of and prevention of insufficient intake of certain	- The effects of low dietary intakes
	minerals	of iron and calcium in the body
	mmerais	and strategies to improve their absorption
Water and fluids	Role of water in the body	- Basic functions of water in the
water and ridius	The importance of an adequate	body
	fluid intake	- Balancing fluid intake with losses
	 Signs of dehydration 	from the body
		- Recommended daily fluid intake
		for adults (2 litres)
		- Population groups who require a
		higher fluid intake
		- Symptoms and effects of
		dehydration
Energy Value Of Foods	■ The energy value of foods	- Foods which are high in calories
		(foods rich in fats, low in water
		content)
		- Foods which are low in calories
		- Value of fruits and vegetables as
	- Food at foot food outlet:	foods with a high water content
	 Food at fast food outlets 	- Critical analysis of most popular
		fast foods for energy value

Food Habits And Needs

<u>Concept</u>	Expected Knowledge	<u>Amplification</u>
Factors Affecting Food Choices	Psychological, social,	- Understanding of differences in
And Eating Patterns	economic and technological	the relative importance and
	factors affecting food choices	impact of psychological, social,
		economic and technological
		factors in the food choices of
		different groups and individuals
	 Availability, accessibility, 	- Causes and implications of
	retailing methods, market	changing dietary patterns (food
	influences, global influences	availability, accessibility,
		retailing methods, marketing;
		global influences [e.g. sustainable
		consumption])
	 Personal preferences and peer 	- Personal food preferences and
	groups	influence of peer groups in
		different settings

Concept		Expected Knowledge	Amplification
Nutrient Goals And Dietary	•	Nutrient goals and dietary	- Definition and function of
Guidelines		guidelines for the Maltese	nutrient goals and dietary
		nation	guidelines
			- The WHO/CINDI Food Pyramid
			and CINDI dietary guidelines;
			justification of the 12 steps to
			healthy eating
			- Recommended percentage of
			energy intake from
			carbohydrates, sugars, proteins,
			fats and saturated fats
			- Recommended daily fibre intake
Di i i i i i i i i i i i i i i i i i i		G 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and dietary cholesterol intake
Physiological Requirements For	•	Specific and changing nutrient	- Pregnancy and lactation
Nutrients		needs of individuals	- Lactose intolerance
			- Coeliacs (Gluten-free)
			- Diabetics (Low in energy, sugar, fats, salt)
			- Hypertensives (Low salt)
			- Vegetarians
			- Elderly
			- Illness and convalescence (fever,
			gastroenteritis)
	•	Adequacy of certain nutrient	- Comparing stated intakes to the
		intakes for specific groups in	recommended intakes of certain
		various stages of the life-cycle	vitamins and minerals for specific
			population groups
Energy Needs Of Individuals	•	Energy balance and imbalance	- Meaning of energy input and
		and the effects on health	output
			- Effects of imbalance: Overweight
			and obesity versus wasting and
			their implications for health
			- BMI ranges and BMI as an indicator of increased risk for
		Factors which influence energy	health problems - Changing energy needs
	-	intakes	throughout the life-cycle,
		makes	focusing on level of activity, rate
			of growth, age, body size and
			gender; to include:
			- Babies (0-1 years)
			- Pre-school children (1-4 years)
			- Growing school children (5-
			10 years)
			- Adolescence (2 nd growth spurt)
			- Pregnancy and lactation
			(foetal nutrition and
			production of milk,
			respectively)
			- Adults (sedentary vs. active)
			- Elderly (healthy or ill)
	•	Healthy weight management	- Healthy weight management
			practices: choice of diet and
			physical activity

Applied Nutrition

Concept	Expected Knowledge	Amplification
The Concept Of A Balanced,	A balanced diet for all based	- Menu and meal planning based
Optimal, Prudent Healthy Diet	on the national nutrient goals	on the national and CINDI
	and dietary guidelines	dietary guidelines
		- The importance of a balance in
		menu and meal planning to
		include: nutrients, energy value,
TI C C C C C C C C C C C C C C C C C C C	7 110	colour, texture, flavour
The Concept Of A Balanced,	Recipe modification to increase health value	- Strategies for modifying recipes to make them healthier
Optimal, Prudent Healthy Diet cont.	The role of traditional foods in	- The value of traditional Maltese
Cont.	promoting healthy diets	dishes and how recipes can be
	promoting neutring diets	modified to make them healthier
		if necessary (e.g. bigilla, torti,
		brunģiel/qarabagħli mimli,
		timpana, pulpetti tal-ħut, stuffat
		tal-fenek, soppa tal-armla, figolla)
The Relationship Between Diet	 Common meal patterns, 	- Prevalence of snacking and
And Health	changing dietary practice and	skipping breakfast; the consistent
	health	use of convenience foods, take-
		out food and food consumption outside the home; awareness of
		health-related advantages and
		disadvantages of organic farming
		and GMOs; fad diets and eating
		disorders and how to make wise
		food choices to ensure healthy
		eating
	Diet-related disorders and	- The role of diet in the
	diseases common and	development and prevention of
	emergent in Malta	obesity, diabetes, coronary heart disease, hypertension, dental
		caries, diverticulosis,
		osteoporosis, constipation,
		anaemia, some cancers (e.g. colo-
		rectal cancer), eating disorders
		- Food intolerances: lactose
		intolerance, gluten intolerance
		(coeliac) and peanut allergy
	 Vegetarian diets and health 	- Types of vegetarian diets: lacto,
		lacto-ovo, pesco, vegans The health benefits of vegatarian
		- The health benefits of vegetarian / plant-based diets
	 Dietary needs for different 	- Recommended food intake for
	stages in the life cycle	maintaining health in different
		population groups: pregnant and
		lactating women, infants (0-1
		years), pre-school children (1-4
		years), growing school children
		(5- 10 years), adolescents, adults,
		the elderly
		- Identification of population
		groups at risk through low or high intakes of specific nutrients
		ingli intakes of specific nutrients

Concept	Expected Knowledge	<u>Amplification</u>
Menu And Meal Planning	 Planning suitable menus and meals for specific conditions 	- Special dietary requirements for diabetics, coeliacs, vegetarians, vegans, individuals on a calorie- reduced, or high-fibre, or low-fat, or low-salt, or low-cholesterol diet
Menu And Meal Planning cont.	Planning economical healthy meals	- Factors to be considered when planning economical healthy meals: e.g. The use of foods in season, use of cheaper cuts of meat, adding vegetables, pulses or soya to extend a meat dish, taking advantage of special offers (buying in bulk and freezing) - Identifying good quality food (nutritional value for money) - Comparing prices per unit, weight, volume and shelf position - Use of energy-saving appliances
	 Nutritional analysis of meals and recipes 	and strategies when cooking food - Analysis of meals and recipes for key nutrients provided (also to meet specific dietary / health needs) - Recommending strategies for improving nutritional value of meals and recipes

Food Production

Trends And Concerns in Food Production	Awareness of present day trends and concerns in food production	 Current consumer concerns, such as the use of GMOs, pesticides, artificial fertilisers, additives, irradiation Production, benefits and safety issues related to GMOs and functional foods Process, advantages and disadvantages of organic farming, aquaculture, hydroponics Animal rearing and slaughtering procedures Animal transmission of disease to humans
	Impact of source and transportation of food on the environment	 Sourcing local food (familiarity with local food, higher freshness and nutritive value of food, appreciation of seasonality, sustaining local economy) Food miles (impact on energy use for transportation, impact on air pollution)

Concept	Expected Knowledge	Amplification
Commercial Distribution And	Means and safety of food	- Food hygiene and safety in
Storage Of Food	transportation	transportation, with a focus on
_		warehouse storage and
		refrigerated ships
	 Storage of food in shopping 	- Safe food storage at shopping
	outlets	outlets: use of coolers/chillers/
		freezers, length of time in storage
		- Safety standards: basic
		understanding of HACCP
Food Packaging	Food safety	- Modified atmosphere packaging
		- Vacuum packaging
		- Toxicity of materials
		- Migration of plasticisers
	- Environmental protection	- Tamper-proof seals
	 Environmental protection 	Sustainability of materialsAir pollution due to production
		process
		- Waste generation
		- Waste generation - Recyclability and (bio)
		degradability of packaging
	 Cost to consumer 	- Cost to consumers of different
		packaging material and of shelf-
		life of packaging
Food Labelling	 Food labelling 	- The importance of proper
	 Symbols on food labels and 	labelling
	their impact on consumer	- Basic EU regulations on food
	choice and health	labelling: e.g. 'Best before', 'Use
		by' and 'Expiry' dates; name and
		address of manufacturer;
		servings; method of storage,
		preparation and serving; weight;
		place of origin; nutritional
		analysis of food
		- Identification and use of Organic,
		Gluten Free, Vegetarian and Fair
		Trade symbols - Information about recycled and
		recyclability properties of
		packaging, including
		identification of symbols
	 Claims and endorsements on 	- Interpreting and using claims for
	food labels and their impact on	making appropriate food choices
	consumer choice and health	- Potential for consumer
		miscomprehension: e.g.
		- A low-fat product may be high
		in sugar and salt content
		- A high fibre food may be high
		in salt
		- Iron deficiency may occur due
		to decrease of red meat/eggs
		often advised in relation to
		management of cholesterol
		- Excess fibre may lead to
		deficiencies due to binding
		with minerals

Food Commodities

<u>Concept</u>	Expected Knowledge	<u>Amplification</u>
Different Foods	Classification of the food: Plant sources including wheat, rice, flour, potatoes, fruits, vegetables, pulses, TVP and soya products Animal sources including meat, poultry, rabbit, fish, eggs, milk, fermented dairy products (cheese [ricotta, gbejniet] and yogurt)	- The main classification of different varieties within the food
	 Production of the food 	- The main steps in food production, outlining underlying scientific principles involved: whole grains vs. refined grains; different types of milk and their production; yoghurt and cheesemaking
	Products of the food	- Different fresh and preserved products of specific foods
	 Structure or composition of the food Different types of the food 	 The physical structure or composition of the food Identification of different types of food within a particular classification (e.g. cod and plaice
	Nutrient content	are different types of white fish) - Emphasis on the nutrients that are present in the food in high and useful amounts - Any key nutrients lacking in the food
	Consumer choice	Guidelines for consumers when purchasing the foodWhat to look for when checking for freshness
	 Uses of the food 	 Different functions of the food. Particular recipes where the food is a main ingredient. Emphasis on traditional recipes
	Methods of cooking the food and different outcomes	using the food. - Different cooking methods that are used to cook specific foods, outlining underlying scientific principles. - Preparation of food for the different cooking methods - Effects of different cooking methods on the appearance, taste, smell, texture and nutritional value of the food.

Concept		Expected Knowledge	<u>Amplification</u>
Different Foods cont.	•	Ensuring the retention of	- The effect of dry and moist heat
		nutrients	on the retention of nutrients:
			- Steaming better than boiling
			- The use of a microwave oven
			or pressure cooker to reduce
			cooking time
			- Last-minute preparation of
			fruit and vegetables – no
			soaking in water
			- Proper storage of dry goods
			and perishable foods
			- Proper use of refrigerator
			and freezer
	•	Storing the food	- Appropriate storage to retain
			freshness and nutritional value of
			food

Food Spoilage And Preservation

Concept	Expected Knowledge	<u>Amplification</u>
Food Spoilage	 The main types of food spoilage The principles underlying the 	- Common examples of microbial (fermentation), biological (over ripening) and chemical (oxidation) food spoilage - Types of micro-organisms and
	growth and control of micro- organisms: bacteria, moulds and yeasts The beneficial and adverse effects of micro-organisms and enzymes in the production of	the conditions necessary for growth and multiplication - Principles underlying the effects of the use of micro-organisms and enzymes in specific foods,
	foods	such as cheeses and yoghurt - Implications for consumer health
Food Poisoning	 Food poisoning organisms and susceptible foodstuffs Process and symptoms of bacterial food poisoning High-risk situations Local regulations regarding food safety Definition and key features of HACCP 	- Causes, process (including incubation period) and symptoms of bacterial food poisoning (namely: salmonella, bacillus cereus and E Coli) - Common situations with potential for food poisoning outbreaks - Basic strategies for safe food handling at school, at work, at the beach, during picnics or BBQs, in food kiosks or food stalls - Food handling certification and food safety inspections, including basic features of HACCP; implications for consumer health and food handling practices
The Preservation Of Food	The scientific principles underlying different methods of preservation	- Dehydration, heat treatment, low temperatures (freezing and chilling), chemical preservatives (traditional and permitted), curing and irradiation.
	 Home refrigeration and freezing 	- Equipment and procedures for efficient and safe refrigeration/ freezing at home

Recommended Textbooks

OCR Home Economics for A2

Food, Nutrition and Health Today (ISBN 978-0-340-97366-0)

OCR Home Economics for AS

Food, Nutrition and Health today (ISBN 978-0-340-96803-1)

Manual of Nutrition

MAFF: the Stationary Office (ISBN 0-11-242991-2)

Food and Nutrition

Anita Tull, Oxford University Press (ISBN 0-19-832766-8)

Cooking Explained

Barbara Hammond and Jill Davies, Longman (ISBN 0-582-30573)

Recommended Reference Book

Understanding Nutrition

Ellie Whitney & Susan Rady Rolfes, Thomson Learning Inc. (ISBN 0-534-62242-9)

Useful Online Sources

Ministry for the Family & Social Solidarity Government of Malta www.msp.gov.mt/services

Ministry for Social Policy

www.sahha.gov.mt

Infectious Disease Prevention and Control Unit

www.health.gov.mt

Ministry for Resources & Rural Affairs

http://www.mrra.gov.mt/

Ministry of Education

www.education.gov.mt

Employment Training Corporation (ETC)

www.etc.gov.mt

National Youth Council of Malta

www.knz.org.mt

Kummissjoni Nazzjonali Persuni B'Diżabilita`

www.knpd.org

Caritas Malta

www.caritasmalta.org

Oasi Foundation - Gozo

www.oasi.org.mt

Consumer & Competition Division - Malta

http://www.gov.mt/frame.asp?l=2&url=http://finance.gov.mt/page.aspx?site=ccd&page=default

European Consumer Center – Malta

http://www.eccnetmalta.gov.mt/home

Dolceta - Online Consumer Education

www.dolceta.eu

7. Coursework (Paper III)

Candidates will be required to present:

Part i. A Food Study Task focusing on one food commodity and comprised of

- a related experiment AND
- a food production task or culinary skill.

The Task may include a classic scientific experiment, a comparative experiment involving food production and testing or sensory analysis, and production of a food, dish or menu to apply nutrition knowledge and demonstrate particular culinary skills. Candidates are required to present a report outlining the whole process involved in the execution of their task and discussing aims, choice of procedures, realisation, outcomes and evaluation. The inclusion of graphical evidence is recommended.

Part ii. An *Investigation* based on <u>one</u> of the Option Areas: i.e. Food Technology, Child Development, Senior Members of Society, Hospitality Services and Textile Studies. Candidates are expected to use <u>two</u> different research techniques from the following: an argumentative researched essay, a report on a visit, an interview, a survey by questionnaire, a comparative survey of products and services, a textile scientific experiment, a case study, a product analysis, an audio-visual presentation, a practical demonstration, recipe development activities, an original product/production. The two techniques should be different from those used in the Food Study Task.

Candidates are encouraged to:

- select appropriate research material
- make use of local relevant information
- plan an investigative procedure
- decide on an appropriate course of action, taking into consideration the priorities identified
- carry out a course of action by applying appropriate skills
- discuss, assess and evaluate the effectiveness of the course of action.

For the Investigation, *Housing* and/or *Sustainability of the Environment* may be incorporated as underlying themes, or as secondary foci in any piece of research within the different Option areas.

Guidelines for the Food Study Task and for the Investigation are in Appendices I and II, and the Assessment Criteria for the Food Study Task and for the Investigation are in Appendices III and IV. The coversheets for the Food Study Task and Investigation are in Appendices V and VI. Forms for candidate's declaration of authenticity are in Appendix VII.

8. OPTION AREAS

A: Food Technology

This option area focuses on the ability to research, select, comprehend and interpret scientific evidence of current technological developments, applied to foodstuffs. The opportunity to encourage creativity is also provided.

Suggestions and Ideas:

- New and alternative methods for the production of foodstuffs (e.g. organic farming, biological pest control, hydroponics, genetic modification, aquaculture, humane animal rearing, the routine use of antibiotics, transmission of diseases through animals, etc.)
- The implications of technology on the processing, packaging and storage of foodstuffs (economic, environmental, nutritional and health perspectives)
- Food quality, safety and legislation
- Creating innovative food products/ processes/ packaging for specific purposes.

B: Child Development

This option area is concerned with the development and care of pre-school children (1-4 years) and primary school children (4-10 years) within the family environment and the community.

Suggestions and Ideas:

- The social, emotional, physical and mental development of the young
- Relationships, values, family life styles and parental responsibilities
- Provisions to meet the changing needs of children (health, safety, education and protection)
- The inclusion of children with special needs.

C: Senior Members of Society

This option focuses on the role and contribution of senior members to society. Adaptations to changing circumstances are also addressed.

Suggestions and Ideas:

- Preparation and coping with retirement
- The emotional, social and economic aspects throughout retirement
- Maintaining a healthy and active lifestyle
- The contribution and active participation within the family and the community
- Welfare provisions and support services

D: Hospitality Industry and Services

This option enables students to gain an insight into the importance of suitable, safe and pleasant environments in the hospitality service industries. The application of this knowledge can be used both in the home and in the community.

Suggestions and Ideas:

- The role and functions of different hospitality services in relation to customers' changing needs and expectations
- The need for appropriate and effective interpersonal and communication skills
- The efficient, economic, hygienic and safe use, control and management of resources
- The overall effect of decor in the working and leisure environments
- The selection and care of textiles, suitable for different purposes, with particular reference to: colour/light fastness, abrasion resistance, absorbency, water repellent properties, fire retardant properties, anti-static properties.
- The impact of tourism on the local natural environment and environment-friendly practices of the hospitality industry

E: Textile Studies

This option enables students to develop scientific knowledge and creative skills in the field of fashion, textiles and technology. This knowledge forms the basis for the choice of suitable personal and household textiles, for use in a rapidly changing society.

Suggestions and Ideas:

- Structure and its effect on the properties of fibres, yarns and fabrics (e.g. insulation, resiliency, elasticity, absorbency, permeability, stability, flammability, resistance to abrasion, light and cleaning procedures, etc.)
- The evaluation of the physical and chemical properties of natural, regenerated and synthetic fibres.
- The selection, care and use of textiles for personal and household use.
- The re-use and recycling of textiles.
- The economic, cultural, social and technological influences on fashion and household textiles.
- The creative use and re-use of textiles.

APPENDIX I

GUIDELINES FOR THE FOOD STUDY TASK

Paper III (part i) (50 marks - 5% of total mark)

The Food Study Task focuses on a food commodity and aims to foster creativity and organisational, investigative, critical, technical and presentation skills in conducting a study around the chosen commodity. Candidates are encouraged to carry out a scientific or comparative experiment, as well as some form of food production to demonstrate application of nutrition knowledge, innovation and/or culinary skills.

The emphasis is on the:

- Formulation of a plan of action
- Choice of resources and procedures
- Realisation of the plan of action
- Demonstration of initiative, creativity and originality
- Competency in organisational, technical and presentation skills
- Demonstration of critical analysis of procedures and outcomes

Candidates need to show evidence of planning, implementation and evaluation through a written report, possibly accompanied with graphical (e.g. photo, video) evidence.

The Food Study Task report should be presented in line with the below template. The required length is of approximately 8-10 pages (excluding Title page).

APPENDIX I CONT.

REPORT TEMPLATE FOR THE FOOD STUDY TASK

The following template should be used to guide the writing up of the report for the Food Study Task. The recommended length is approximately **8-10 pages** (excluding Title page).

Title of Food Study	- Title, candidate's name, o	date	
Aims and Design (approx. 1 page) (max. 4 marks) Implementation and Presentation of Results (approx. 4-6 pages) (max. 25 marks)	 Outline of aims and simple introduction to tasks (food experiment and food production/ culinary skill component). Explanation of the process of the food study tasks. Step-by-step record of the process (text and photographic evidence if appropriate) For the experiment, should include the aim, apparatus required, method, results and conclusions. For the food production or culinary skill component, should include a time plan, evidence of implementation, discussion of outcomes. 		
Nutritional Analysis (of food product / dish / meal) (approx 0.5 page) (max. 8 marks)	Protein Carbohydrates of which Sugars Fat of which Saturated Fats Sodium Fibre Other (Optional):	Analysis (per item / portion / dish)	
Cost Analysis (of food product / dish / meal) (approx. 0.5 page) (max. 3 marks)	Item	Cost Total Cost=	
Evaluation of task (approx. 2 pages) (max. 10 marks)	- Critical discussion of the various results of the study and of the actual procedures.		

APPENDIX II

GUIDELINES FOR THE INVESTIGATION

Paper III (part ii) (100 marks - 20% of total mark)

As a general guide for a particular investigation marked out of 100, assessment should be based on the following criteria:

Title Analysis, Aims and Research Techniques

(Max. 20 marks)

Candidates should be able to:

- select the topic or area of study and give a detailed analysis of all factors involved
- identify particular areas of priority and give a reasoned account for the chosen investigatory procedures

Research Design and Recording of Information

(Max. 15 marks)

Candidates should be able to:

- justify use of a variety of methods of investigation thoroughly and well, and develop a worthwhile study
- collate and present data including local information

Planning, Organisation and Implementation of Investigative Techniques

(Max. 25 marks)

Candidates should be able to:

- analyse the results from the initial research
- draw detailed conclusions and make well reasoned decisions
- show effective use of the evidence gained from preliminary findings to organise and plan further in-depth research and a worthwhile study
- clearly indicate the field of study, stating the priorities, and show the ability to make informed judgements based on the evidence found
- plan and organise the logistics to implement the research
- carry out a number of different, appropriate methods of enquiry at a high level
- demonstrate skilful realisation of investigatory work

Presentation and Discussion of Results

(Max. 20 marks)

Candidates should be able to:

- present results accurately and effectively
- show linkages between results from different investigative techniques
- give a critical discussion of the results and their implications
- present justified overall conclusions

Evaluation (Max. 20 marks)

Candidates should be able to:

- present a critical analysis of the effectiveness of the study and of the course of action from which the study developed
- identify and outline possible future developments as a result of the research.

The Scope of the Investigation

The Investigation report should not exceed 40 pages (excluding the Appendices, Bibliography and pages showing solely Tables, Figures, diagrams, plates or photos,). The activity should address a clearly defined, focused area of the syllabus content and involve the use of primary and secondary sources. The investigation activity should provide opportunities for candidates to demonstrate their understanding of the connections and relationships between some of the aspects of Home Economics and Human Ecology represented in this area of the syllabus. It should also present opportunities for practical activities appropriate to the activity selected.

In pursuit of efficiency it is recommended that candidates should:

- avoid titles of a general nature which will generate numerous wide-ranging activities;
- use the evidence from secondary research to select no more than three practical activities which can feasibly be undertaken within the allocated time:
- select titles which will limit the amount of secondary information recorded;
- limit the scope of their secondary research to those aspects which are specific to the assignment wide-ranging research into every aspect of the topic is not expected.

APPENDIX II CONT.

Presentation of the Investigation Report:

It is recommended that the investigative activities undertaken by candidates should be written up in a report using a format similar to that set out below.

- Title This should be focused and provide a concise summary of the main idea of the investigation. The investigation selected should offer appropriate intellectual challenge and be capable of being investigated at Advanced Matriculation standard. A title which is of a general nature and invites a project style approach should be avoided.
- Introduction The area, problem or issue being studied should be specified and an explanation of why it is important provided. The introduction should indicate the connections and relationships between the specification content. Relevant theory which supports the issues being investigated should be included and used to clarify how and why the aim(s) were derived. The style should be in the form of an "argued essay".
- Statement of Aims (and/or objectives) The aim(s) of the research component should be stated in a clear, logical and focused manner which clarifies the title. One realistic and succinct aim is preferable to three or four aims which may be vague and unclear. The aim(s) should be capable of being realised in the allocated time.
- Methods This section should include a description of what was done and why, and indicate how the investigation(s) undertaken have fulfilled the aim(s). The write-up should be concise yet sufficiently detailed to permit the replication of the investigation(s). The description of the design of the investigation might include:
- identification of the main issues;
- the method of approach and why this method was chosen, e.g. link with the aim(s) and the secondary research;
- the procedures employed to collect the data, e.g. questionnaires, interviews, case studies, observation, sensory analysis, experimental work, recipe development activities, product analysis or development;
- relevant characteristics of the participants, e.g. numbers, gender, age;
- ethical considerations;
- percentage response;
- how the results compare with relevant secondary research;
- the limitations of any procedure or method employed and any problems encountered;
- some evaluation with reasoned justification and discussion of the issues.
- Results and Discussion Data should be summarised and set out in a logical format. Tables and figures should be presented within the text, appropriately titled. Some interpretation and reasoned discussion of the results should be provided. The results should be compared with the relevant secondary research. Results should be evaluated realistically and critically.
- Conclusions In relation to each aim, a statement of what has been concluded should be provided along with a reasoned explanation based on the theoretical evidence previously cited. Where an aim cannot be realised because of the findings or where the findings are contradictory, a reasoned explanation should be included. A brief evaluation of the strengths and weaknesses of the investigation and of the research process should be included along with suggestions for improvement. Areas or issues for future research might be suggested and justified.
- Bibliography References should be acknowledged within the text and itemised in a bibliography at the end of the report. Lack of references to sources may be regarded as plagiarism. The standard format for a bibliography should be followed. Details of all sources of information should be accurate.
- Appendices Include evidence to support and justify statements and decisions documented in the report. For example, an original questionnaire or interview schedule, primary research data, an example of letters written and received, relevant secondary research data and photographic evidence might be included.

Note: The text should be on one side of A4 paper only. It should be legible, in hand-written or printed form, and the pages numbered.

APPENDIX III

ASSESSMENT CRITERIA FOR THE FOOD STUDY TASK

For a Food Study Task marked out of 50, the following criteria should be adopted:

Aims and Design	(Max. 4 marks)
0-2	- Limited and unclear explanation of the aims and design of the food study tasks
3-4	- Thorough and clear explanation of the aims and design of the food study tasks
Implementation and	Presentation of Results (Max. 25 marks)
0-10	 Required considerable help in the formulation of a plan of action and choice of procedures Showed low level of competence in management, organisational and technical skills Poor and inaccurate presentation of results
11-19	 Some assistance required in the formulation of a plan of action and choice of procedures Showed competence in a number of management, organisational and technical skills Appropriate presentation of results
20-25	 Detailed formulation of a plan of action and choice of procedures carried out independently Showed a high level of competence in management, organisational and technical skills Accurate, concise and excellently presented results
Nutritional Analysis	
0-4	 Required considerable help in analysing nutritional value of items prepared for practical session Incomplete computation of nutritional value Inappropriate and/or inaccurate presentation of results
5-8	Worked independently in analysing nutritional value of items prepared for practical session Complete computation of nutritional value Accurate and excellently presented results
Cost Analysis	(Max. 3 marks)
0-1	- Incomplete shopping list and/or cost of ingredients/materials missing
2-3	- Complete shopping list and accurate calculation of cost of ingredients/materials
Evaluation	(Max. 10 marks)
0-4	- Limited and superficial evaluation with no identification of strengths and limitations for both practical session and experiment
5-8	- Adequate evaluation with some strengths and limitations identified for the practical session and experiment
9-10	- Thorough evaluation of both the practical session and experiment

(Note: Mark obtained by candidate out of 50 marks, divided by 10 will give mark out of 5% which is the weighting of the Food Study Task.)

APPENDIX IV

ASSESSMENT CRITERIA FOR THE INVESTIGATION

For an Investigation marked out of 100, the following criteria should be adopted:

Title Analysis, Aims	and	Research Techniques	(Max. 20 marks)
1-5	-	Needs help to select topic/area and briefly analyses title.	
	-	Presents a number of themes to be explored in the study without	showing depth and
		understanding in presentation of arguments.	• •
	-	Requires help in choosing techniques and suggests some relevant	t aims for each
		technique.	
6-13	-	Independently selects topic/area and carries out a good analysis of	of title.
	-	Presents a number of themes to be explored in the study, showing	g good
		argumentation.	
	-	Chooses techniques independently and presents some relevant air	ms for each
		technique.	
14-20	-	Shows creativity in selecting topic/area and presents a detailed ti	tle analysis.
	-	Presents the main themes to be explored in the study comprehens	sively, showing very
		good argumentation when analysing and exploring the themes.	
	-	Chooses techniques independently and presents detailed and rele	vant aims for each
		technique. Shows clear evidence of understanding of initial resea	rch.
Research Design and	d Rec	cording of Information	(Max. 15 marks)
1-5	-	Outlines briefly the advantages and disadvantages of each choser	n research technique
		and gives few suggestions on how problems could be overcome.	-
	-	Presents a research chapter which deals with the topic in question	n, but is not
		sufficiently focused.	
	-	Limited reference to the local or international situation.	
6-10	-	Presents a discussion of advantages and disadvantages of each ch	nosen research
		technique and gives suggestions on how problems could be overe	come.
	-	Presents a focused research chapter, which deals with the topic in	question, but shows
		inadequate understanding of the research presented.	
	-	Some reference to the local or international situation.	
11-15	-	Presents a detailed discussion of advantages and limitations of ea	ch chosen research
		technique, outlining how the techniques complement one another	r, and gives practical
		suggestions on how problems could be dealt with.	
	-	Presents a focused and thorough research chapter, which deals w	ith the topic in
		question and shows clear understanding of the research presented	l.
	-	Makes good reference to the local or international situation.	
Planning, Organisat	ion a	and Implementation of Investigative Techniques	(Max. 25 marks)
1-8	-	Presents a plan of action which is not detailed and which does no	ot mention the most
		important factors which need to be considered during the study.	
	-	Techniques executed, but not necessarily in an efficient or logical	al manner and
		sequence. Shows limited planning and preparation for each technical	nique.
	-	Limited links between one technique and another.	
	-	Reports of techniques used are limited, showing that skills relate	ed to the use of the
		investigative methods have not been grasped.	
9-16		Presents a detailed plan of action, but which does not adequately	refer to all the
	-		
	-	important factors which need to be considered during the study.	
	-	important factors which need to be considered during the study. Techniques executed in a relatively efficient and logical manner	and sequence,
	-	important factors which need to be considered during the study.	and sequence,
	-	important factors which need to be considered during the study. Techniques executed in a relatively efficient and logical manner showing planning and preparation for each technique. Shows links between one technique and another.	-
	-	important factors which need to be considered during the study. Techniques executed in a relatively efficient and logical manner showing planning and preparation for each technique. Shows links between one technique and another. Detailed reports of techniques used are presented, showing that	-
	-	important factors which need to be considered during the study. Techniques executed in a relatively efficient and logical manner showing planning and preparation for each technique. Shows links between one technique and another. Detailed reports of techniques used are presented, showing that use of investigative methods have been grasped and practised.	skills related to the
17-25	-	important factors which need to be considered during the study. Techniques executed in a relatively efficient and logical manner showing planning and preparation for each technique. Shows links between one technique and another. Detailed reports of techniques used are presented, showing that use of investigative methods have been grasped and practised. Presents a detailed plan of action and refers to all the most impo	skills related to the
17-25	- - -	important factors which need to be considered during the study. Techniques executed in a relatively efficient and logical manner showing planning and preparation for each technique. Shows links between one technique and another. Detailed reports of techniques used are presented, showing that use of investigative methods have been grasped and practised. Presents a detailed plan of action and refers to all the most imponeed to be considered during the study.	skills related to the
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17-25	- - -	important factors which need to be considered during the study. Techniques executed in a relatively efficient and logical manner showing planning and preparation for each technique. Shows links between one technique and another. Detailed reports of techniques used are presented, showing that use of investigative methods have been grasped and practised. Presents a detailed plan of action and refers to all the most imponeed to be considered during the study. Techniques executed, in an efficient and logical manner and seq thorough planning and preparation for each technique.	rtant factors which uence, showing that skills related to

APPENDIX IV CONT.

Presentation and D	iscussion of Results (Max. 20 marks)
1-5	 Poor presentation and discussion of findings of each technique. A limited final discussion in which the information obtained through research, knowledge gained through the techniques and personal opinions are poorly presented.
6-13	 Adequate presentation and discussion of findings of each technique. A good final discussion in which the information obtained through research, knowledge gained through the techniques and personal opinions are adequately presented.
14-20	 Very good presentation of findings of each technique. A very detailed final discussion in which the information obtained through research, knowledge gained through the techniques and personal opinions are comprehensively presented.
Evaluation	(Max. 20 marks)
1-5	 Provides a limited assessment of the work undertaken and of the results, and recognises to a basic level the degree to which this furthers the effectiveness of the study. Makes limited reference to possible areas of further study resulting from this piece of work. No or very limited List of References / Bibliography included.
6-13	 Provides a satisfactory assessment of the work undertaken and of the results, and analyses the contribution these make to the effectiveness of the study. Identifies, giving basic reasons, possible areas of further study resulting from this piece of work. Adequate List of References / Bibliography included.
14-20	 Provides a critical analysis of the effectiveness of the study and of the course of action from which it developed. Identifies, with thorough justifications, an extensive range of possible areas of further study resulting from this piece of work. Extensive List of References / Bibliography included.

(Note: Mark obtained by candidate out of 100, divided by 5 will give mark out of 20% which is the weighting of the Investigation.)

APPENDIX V

UNIVERSITY OF MALTA ADVANCED MATRICULATION EXAMINATION HOME ECONOMICS AND HUMAN ECOLOGY

Coursework - Assessment Sheet - Food Study Task (Paper III part i)

FOOD STUDY TASK MARK S

Centre Name:		Cer	ntre Number:	
Candidate's Name:				
Syllabus Number:		Pap	er Number: <u>III Part i</u>	
Food Study Task Title:				
		Tutor	Moderator	FINAL MARK
Aims And Design	4 marks			
Implementation And Presentation Of Results	25 marks			
Nutritional Analysis	8 marks			
Cost Analysis	3 marks			
Evaluation	10 marks			
Total Mark	(Max. 50 marks)			
		FINA	AL MARK (max. 5%	5):
AUTHENTICATION by the HOM I declare that the candidate's activi knowledge, no assistance has becassessment and has been identified	ties have been en given apar	kept under r rt from any	egular supervision a	nd that, to th
Signature:	Date: _			
Signature.				

APPENDIX VI

UNIVERSITY OF MALTA ADVANCED MATRICULATION EXAMINATION HOME ECONOMICS AND HUMAN ECOLOGY Coursework – Investigation (Paper IIII part ii)

INVESTIGATION MARK SHEET

This sheet must be completed a	nd signed by the Home Econo	omics and Human Ecology tu	tor and placed
on top of the candidate's work.	A declaration of authenticity	y signed by the candidate mu	ist be attached
to this sheet.			

Centre Name:	Ce	entre Number:	
Candidate's Name:	Ca	andidate's Number:	
Syllabus Number:	Paper Number: <u>III Part ii</u>		
Title:	O _j	ption Area:	
		TUTOR	MODERATOR
Title Analysis, Aims and Research Tec (20 marks)	hniques		
Research Design and Recording of Info (15 marks)			
Planning, Organisation and Implemen Investigative Techniques (25 marks)			
	1		
Evaluation (20 marks) Total Mark	(Max. 100 marks)		
AUTHENTICATION by the HOME	ECONOMICS AND		ax. 20%):
I declare that the candidate's activities knowledge, no assistance has been assessment and has been identified and	have been kept under given apart from an	regular supervision a	nd that, to the best of my
Signature:	Date:		
Name of Tutor (block letters):	Address of Tutor:		

APPENDIX VII

UNIVERSITY OF MALTA ADVANCED MATRICULATION EXAMINATION HOME ECONOMICS AND HUMAN ECOLOGY COURSEWORK – FOOD STUDY TASK (Paper III part i)

AUTHENTICATION by CANDIDA	ΓΕ
•	involved without external assistance apart from any which is acceptable
Signature:	Date:
UNIVERSITY OF MALTA ADVANCED MATRICULATION EX HOME ECONOMICS AND HUMAN COURSEWORK – INVESTIGATION	ECOLOGY
AUTHENTICATION by CANDIDA	<u>ΓΕ</u>
I declare that I have produced the work under the scheme of assessment and is red	involved without external assistance apart from any which is acceptable corded.
Signature:	Date: