City College Norwich

Course Title	**Agricultural Management, BSc (Hons) (Top-Up)**
Awarding Body	University of East Anglia
Level of Award	Undergraduate
Professional, Statutory and Regulatory Bodies Recognition	
Credit Structure	Level 6: 120 Credits
Mode of Attendance	Full-time
Standard Length of Course	1 year
Intended Award	Agricultural Management, BSc (Hons) (Top-Up)
Fall-back Awards	Unclassified Degree (BA) – 300 Credits
Entry Requirements	240 credits (120 at level 4 and 120 at level 5) or equivalent HND qualification in a suitable subject area. GCSE in Maths, English and Science at Grade C or above are desirable English as a second language students must demonstrate attainment of IELTS at level 6.0
Delivering Institution(s)	Easton College
Easton Course Code	F0078
UCAS Code	D402

Course Structure

Level 6

Advanced Sustainable Agronomy – (EC136)

20 Credits

The module is designed to look in detail at aspects of current agronomy practice that show best practice in integrated crop management, taking into account the need for sustainable practice and the need to produce high quality food at minimum cost.
Aspects of agronomy to be explored will include grass weed control in an arable rotation, control of fungal disease in cereals, with a focus on *Septoria tritici* and yellow rust, management of potato cyst nematode and control of aphids as virus vectors. The epidemiology of the pathogen will be elucidated to provide underpinning knowledge in evaluation of the effectiveness of control methods and identify potential alternative methods of control.

The optimisation of soil management practices to achieve a sustainable outcome will be discussed and evaluated.

Issues such as adverse environmental effects of husbandry will be explored, the assessment of the risks and benefits of the various husbandry options will be undertaken.

Consideration of aspects of biotechnology will be undertaken together with a review of improvements available through conventional plant breeding and novel methods of pest control including biological control options.
Evaluation of technical and regulatory influences limiting agrochemical control of crop threats will form an important part of the module including the coverage of pesticide resistance to agrochemicals and the current EU wide review of active ingredients and the move from a risk-based assessment to a hazard-based assessment.
The final part of the module will deal with the wider social and regulatory context of introducing new technologies, exploring the differential uptake of biotechnology in different parts of the world and the regulatory requirements governing the introduction of new pesticides.

The core of the module will be delivered by Easton College staff, with significant input from CCA partners, particularly those from the UEA, JIC and NIAB-TAG.

Potential guest speakers include the distributor and manufacturer sides of the agrochemical industry and Government regulatory bodies.

Assessment Details –

Assessment Type	% Wt	Comments	LO
Exam	**70**	**2 hr exam**	**1-2, 4**
Case Study	**30**	**1000 words**	**3**

Team Planning Project – (EC137)

This module is designed to allow the student to further explore the challenges of team working in the context of project planning and management, building on the individual business, research and personal skills developed in Employment Skills (level 4) and Work Based Learning Project (level 5). It will further develop understanding of the underpinning group interaction that will lead to successful team working. Working in small teams, the students will identify a project concerned with an improvement of an agricultural business.

The project could focus one of the college enterprises, including Animal Welfare, Environmental Management, and Crop Productivity. Research and analysis for any project is key and projects could be for improved business planning or improving the farm as an educational resource.

The module leader may also suggest team project ideas for students to develop, as the College may often be approached by industry with research needs or students may identify their own project from industry contacts.

The team will identify roles for each member in the planning of the project. There is a requirement to analyse the role allocation process to give an insight into the group dynamics. The planning will include a feasibility study, a detailed plan including resources and a budget, the necessary risk assessments and other Health and Safety considerations and an operational schedule which gives a timescale. Other appropriate legislation should also be researched.

The final stage of the module will be a reflection by the team members on the project process and an evaluation of the final outcome compared with the initial concept. The assessment tasks are tightly word limited, providing a challenge to effectively communicate in a concise fashion.

The module will be delivered by Easton College staff or where the project is linked to an industry partner an industry mentor may also support the learning. Students will be expected to identify and access any equipment that they may require by negotiation with their tutor or employer. Tutor support will be available at designated times during the project.

Students will be expected to undertake substantial periods of independent study and tutor support will move to providing assistance in write up methodologies and protocols as the project progresses. The extent of the support required by the individual student will be recorded and used to advise decisions on grading. Tutor intervention should not be sufficiently detailed and frequent to prevent the student from demonstrating the achievement of each criterion.

Assessment Details –

Assessment Type	% Wt	Comments	LO
Group report	**60**	**Each group member receives the same mark (1200 words)**	**2-3**
Terms of reference document	**20**	**Each group member receives the same mark (400 words)**	**1**
Peer assessment	**20**	**Individual evaluation of process including reflection of team members (400 words)**	**4**

10 Credits

Sustainable Livestock Management – (EC139)

This module builds on the knowledge gained from Livestock Modules at level 4 and 5 and evaluates the sustainable management practices required on modern UK livestock units. It looks beyond the individual enterprise to the wider industry and investigates recent factors and issues that influence production profitability and sustainability. It will provide opportunities to gain greater depth of knowledge on specific livestock/enterprise types and to analyse system performance while considering the influence of external and internal factors.

Modern livestock enterprises need to be treated as businesses. The need to be aware of enterprise performance and associated fluctuations is essential.

The importance of systems planning will be reviewed and the importance of measuring performance against SMART targets discussed.

Research on cost factors will be undertaken and expenditure on feed will be identified as the biggest factor affecting profitability and the importance of careful, precise management of nutrition will be discussed. The external influences on which feed cost fluctuations are dependant will be analysed.

Ration requirements will be determined for a range of livestock groups with ration formulation practices and designs will be investigated and compared. This will lead to the development of feed budgets. The advantages of forward planning and shrewd purchasing will be discussed.

Producers' responsibility for the wastes produced both directly and indirectly by their enterprises will be acknowledged with the impacts of waste management regulations and practices justified.

World sustainability issues/challenges such as energy and water use are as relevant to the efficient running of the business as they are to the local and wider environment.

Public interest in these issues as well as animal welfare, ethics, production methods and supporting local food are all considered throughout this module.

Delivery will be through lectures, seminars, visits, use of multimedia and self-study. Traditional, contemporary and innovative production methods and business practices will be deconstructed and appraised.

The development of knowledge in this area will allow the synthesis of proposals and arguments in response to the need to design future proof, sustainable livestock production systems.

Assessment Details –

Assessment Type	% Wt	Comments	LO
Case Study	**100**	Produce a case study of an identified livestock unit **3000 words**	**1-5**

20 Credits

Global Agriculture – (EC141)

20 Credits

The first part of the module takes an overview of global agriculture, identifying the major areas of production of food and non-food commodities. A selection of systems of farming practiced in the different areas will also be included in the study.

The factors that constrain production will also be considered including climatic, soil, water technological and socio-economic.

Case studies will be considered to evaluate the potential for overcoming the current and predicted future limitations to production. These will cover topics such as the predicted effect of climate change, increasing demand for food from a world population that is growing and becoming more affluent, the high price and limited availability of energy for farming, and competition for land and water from urban populations and non-food crops. A broad range of conventional and innovative solutions to the challenges facing the industry will be studied.

Commercial ancillary industries will also be studied, partly through their involvement in the supply chain but also as international organisations that have considerable influence over international trade and enterprise efficiency and profitability. This will also lead into the research and development organisations, their structure and roles both nationally and internationally. The role of European Parliament/Union and other International governments / organisations on agriculture will be reviewed.

All outcomes will be considered in the context of the 4 pillars of sustainability; environmental enhancement, resource use, social wellbeing and economic development.

The core of the module will be delivered by Easton College staff together with significant input from CCA partners, particularly from the UEA and JIC. Guest speakers from ancillary businesses, major supply chains and environmental/humanity charities are likely to be involved as well.

Assessment Details –

Assessment Type	% Wt	Comments	LO
Debate	**20**	**30 minute debate with key themes allocated to students**	**2**
Exam	**50**	**2 hr**	**1, 3, 5**
Reflective Essay	**30**	**1000 word**	**4**

Innovative Technology – (EC143)

10 Credits

In the study of livestock and crop production the student will have been introduced to innovative systems of mechanical operation and the purpose of this module is to enable the student to research, evaluate, and study some of those systems in greater depth with a view to;

- evaluating the underlying concepts
- considering decisions relating to costs, benefits, time constraint, environmental impact, usage and management of resources
- providing the intellectual tools to make sound management decisions.

Within the areas of mechanisation studied students will be expected to research and identify management processes and systems of delivery and these will be supported through components of practical assessment of such systems.

There will be the use of case studies to illustrate the different mechanisation and developments of systems and resources to undertake the process of production.

There will also be an evaluative study of the impact on the components of production – from the natural elements with research into changes and effects on what determines and ensures production takes place through to the use of more mechanised management techniques.

A review will be made of how different processes and mechanical systems can alter and effect production, sustainability and efficiency of management decisions relating to a range of water, soil, capital and human resource application.

An analysis of the cost benefit of systems designed to support mechanisation will be undertaken including an investigation and evaluation of a number of modern effective mechanical, electrical and remote systems which can affect and enhance production.

Management of everyday processes through increased mechanisation and electronic control methods will be investigated to identify where effective management and skill development can enhance production.

There will be emphases on economic and environmental sustainability within the systems evaluated.

Delivery will utilise the facilities at Easton College, links with the CCA partners (UEA, NIAB-TAG) and wider links within the industry through practical activities and visits to identify mechanical developments and application to management of a range of production resources.

Assessment Details –

Assessment Type	% Wt	Comments	LO
Written Exam	**70**	**1 hr 30 mins**	**1 - 4**
Presentation	**30**	**10 minutes (1000-word equivalent)**	**1 - 4**

Advanced Business Management Marketing and Economics- (EC144)

20 Credits

Food production, distribution and efficient resourcing in a politically and economically changing sector is increasingly important in the UK and the world and this module further develops an understanding of the influences that the agricultural industry has to respond to. It provides development of concepts gained in management/husbandry/production/mechanisation modules together with research and reflection on the part played by Governments and trade organisations in regard to the agricultural economy.

Learners will study and research agricultural economics that will enable an understanding of how the farming business relates to the general economy and the importance of management of the political and marketing elements in the agricultural industry. Agriculture is everchanging – although this is evidenced by it operating in a controlled environment where changes can be extremely rapid.

Management and marketing expertise enable appropriate responses to these changes.

This module enables learners to research and understand how agriculture involves a variety of complex decisions. For example, strategic management decisions from the point of production to the point of consumption. This is an area where effective marketing management can have a valuable impact on business performance.

Learners research and evaluate the impacts of the EU, World Trade Organisation (WTO) and other influential bodies dealing with agriculture, including major buyers such as supermarkets.

Learners will look at the strategic management of the agricultural sector including price levels, the control of the buyer, fixed and variable costs of production, quotas, climate, sustainability and changing public perceptions and responses to externally determined decisions.

The module provides an opportunity to research strategic production and marketing principles, influences and approaches applied in an agricultural context, by integrating the process which links strategic decisions with agricultural business planning. Case studies of organisations in the farming sector can be used to identify and undertake research and investigative study. Guest speakers and visits will also be an important part of the learning experience such as DEFRA, NFU, Environment Agency, Anglia Farmers, European parliament and other organisations.

Assessment Details –

Assessment Type	% Wt	Comments	LO
Assignment	**50**		**1 - 4**
Research Evaluation	**30**	**Portfolio of evidence**	**1 - 4**
Presentation	**20**		**1 - 4**