

Mark Zealander and Barry Dore descibe the work that has gone into their respective courses

## **Two Qualifications - One Set of Study**

Mark Zealander has been taking a Certificate of Higher Education and BSc at Cannington College.



It's coming up to the halfway point in my qualification, so I thought it is a good time to report on my progress under the BIGGA and Ransomes Jacobsen Ltd sponsorship scheme.

First I will explain the route I am taking in the search for a BSc Hons. My original route was to study a Foundation Degree in Soil Science and Technology at Cannington College as a year part-time course. I was advised by my tutor to study the first two years at Certificate of

Higher Education (C of HE) level and bridge to the third year of the foundation degree. This way I would achieve two qualifications without extra study. So from September 2002 I started the C of HE part-time. The Certificate of Higher Education breaks down into the following modules:

- Year One Golf Course Construction
- Grass Establishment and Sward Maintenance
- Foundation Science
- Statistics
- Year Two Ecology
- Plant Protection
- Machinery

Each module comprises of two written assignments and one end of module exam. The overall grade breaks down as follows:

- Assignment 1 = 30%
- Assignment 2 = 30%
- Module exam = 40%

#### **GOLF COURSE CONSTRUCTION**

This module is self-explanatory and covers the history and background of construction methods, site and soil surveying, aspects of golf course design and construction of golf course features.

The first assignment required me to research the methods of greens construction and produce a report for a committee, recommending a suitable method and display the costing.

The second assignment involved assessing the layout of two golf holes and redesign them to test the modern high and low handicap club golfer.

#### **GRASS ESTABLISHMENT AND SWARD MAINTENANCE**

This module covers the science behind the daily course maintenance, such as aeration, top-dressing and nutrition.

Assignment One was aimed at the definition and meaning of many greenkeeping terms, allowing me to thoroughly research each one.

- Assignment Two was based around:
- Understanding the causes of wear and tear.
- · Ways of reducing the problems.
- · Design and layout assessments.
- Compaction problems.

#### FOUNDATION SCIENCE

This was the more intense module as I looked at elements and atomic structures, chemical bonding and analysis, organic chemistry and biology.

The first assignment required me to analyse soil macro nutrients and why they are important to healthy plant growth. I also researched into the damaging effects of soluble fertilisers when over used.

In the second assignment we researched the structure of a plant cell and the role of each organ.

#### STATISTICS

This module is included for progression reasons and is needed when going on to do a BSc. It includes distribution, regression, and general data processing.

#### ECOLOGY

In ecology I have been looking at woodland and hedge management and planting, techniques of grassland and heathland maintenance for habitat management.

I am currently working on the first assignment, which requires me to assess a golf course for new tree planting and recommend a suitable design. Including a maintenance plan and any problems over the next 50 years.

#### **PLANT PROTECTION**

This looks at Integrated Pest Management (IPM), the use of pesticides on the golf course and the health and safety implications.

In the first assignment I researched into pest and disease management and cultural, chemical and biological methods of management.

#### MACHINERY

As I have been in greenkeeping for over eight years I was able to get full credit for this module and not have to study it. The module includes all aspects of machinery management and health and safety.

I have received good grades throughout the modules, and I am on target to complete the C of HE this summer. I am now considering the option of completing the Foundation degree online as distance learning. Once this is complete I can start the BSc qualification. I would like to take this opportunity to thank BIGGA and Ransomes Jacobsen Ltd for the sponsorship, which has helped me with the tuition fees. I am also fits grateful to my former tutor Mr Phil Sharpies for his help and support and wish him success in his new post.

# My Experiences on the MSc in Sports Surface Technology Course

### Barry Dore has been taking a MSc at Cranfield University.



I have been involved in the greenkeeping industry for the last 10 years. Four years were spent in full time education. I worked at the Hertfordshire Golf and Country Club for five years where I gained valuable practical experience of golf course maintenance.

I enjoyed my time at The Hertfordshire and learned a lot from the Course Superindendant Richard Sheppard, and American Golf who managed the club. However, I reached a point

where I felt I needed to improve my technical knowledge of turf management. I wanted to learn about the management of other sports surfaces such as cricket pitches, grass tennis courts, football pitches etc. I also wanted to widen my career options within the sportsturf industry.

As a result of a conversation with Andy Pledger, who was assistant greenkeeper at the Hertfordshire at the time, I discovered that Cranfield University had just begun a degree course in sports turf agronomy. I made some enquiries and found out that the course was in fact a Masters degree and not a Batchelors degree as I first suspected. Suddenly the challenge seemed to increase dramatically, however, following an interview with Alex Vickers, the Course Director, I felt more reassured that I would be capable of completing the course.

The next issue I had to address was raising the finance required to complete the course. The university was able to provide a bursary to cover part of the course fees. I then discovered that Ransomes Jacobsen were providing a Higher Education Scholarship for those wishing to further their education. I subsequently applied to BIGGA for the award, and was very pleased to find out that my application was successful. The award that I received paid for a substantial amount of the tuition fees.

Students have the option of completing the MSc course full time over a one year period or part time over a two to five year period. I chose to leave my position at the Hertfordshire and study for the course full time from October 2002 to September 2003.

There are four major components to the MSc course:

a) Taught Modules – This section took place between October and March. It involved going to lectures, doing assignments and undertaking tests set by the university. Each of the ten modules were completed over a two week period. I found this period of the course quite intensive and realised that I had to improve my time management skills especially to complete the assignments on time. Modules included subjects such as Human Resources Management, Soil Science, Sports Surface Playability and Irrigation Management and Optimisation. Taught modules are worth 30% of the total mark on the course.

b) Written examinations – At the end of April, I was required to complete two written examinations which were worth 20% of the total mark for the course. These exams were designed to test our general knowledge of sports turf management.

c) Sportsturf Construction module – By May, I had completed half of the coursework and was feeling relieved to have finished the written examinations. The last taught module was the Sportsturf Construction module. Coming from a predominantly golf background this module was very informative, as I learned about the construction of natural and artificial sports surfaces, such as football, tennis and cricket. The assignment for this module was worth 10% of the total mark.

d) Thesis – As part of the course you are required to undertake a research project on a given topic or on one of your own choosing. The aim of my project was to find the optimum level of nitrogen application for a grass tennis court, that would minimise slip on a grass tennis court while still allowing for good growth and presentation. I carried out an experiment on the cricket square at Cranfield University using four different amounts of nitrogen. I conducted a number of assessments such as slip measurement, grass coverage, surface hardness, colour and tissue analysis on each of the twelve plots of turf. With the data obtained from these assessments I had to statistically analyse the results in order to draw out objective conclusions to include in the report. The research project took about three months to complete and was worth 40% of the total mark of the course. This was a completely new experience for me as I had never had the opportunity to do any research in the past. It gave me an insight into the processes involved in developing new ideas and theories which aim to make improvements in the sportsturf industry.

#### Benefits from the course;

- · It improved my IT and report writing skills.
- It improved my technical knowledge of sportsturf science.
- I feel more equipped to do whatever job I will involved with in the future.
- It gave me the opportunity to meet new people in the industry.
- The course has given me new options as to what type of career I could pursue both in golf and in other sports.
- It gave me a rewarding sense of achievement at having successfully passed a course that I never thought I would be in a position to do.

#### Some difficulties experienced during the course

- I found the period of time during the taught modules very intense, with assignments to complete, lectures to attend and tests to sit.
- Some of the modules highlighted the need to improve my knowledge of mathematics, particularly the modules on soil science and the thesis.
- I found that I needed to be self motivated, as it can be quite isolating at times when you live off campus as I did.

I am glad to say that I successfully passed the course in September 2003. I would without any hesitation, recommend the MSc in Sports Surface Technology to anyone in the sportsturf industry who is considering developing their knowledge and wishing to widen their career prospects. I believe the course is a real breakthrough for education in sportsturf science, and will help to raise the profile and the standard of professionalism within the sports turf industry as a whole. I will be starting a new job as a Grounds Supervisor at the Hurlingham Club in London in the near future, which I am really looking forward to. The Hurlingham Club is a highly prestigious sports club situated in west London. The club has a number of fine turf surfaces including tennis, bowls, croquet and cricket.

I would like to thank Ransomes Jacobsen for giving me a Higher Education Scholarship which was a great help in financing the course. In particular, I would like to thank David Withers, the Sales and Marketing Director of Ransomes Jacobsen, who send me letters of support throughout the year. I am also grateful to Ken Richardson, the Education and Training Manager at BIGGA, who recommended me for the award and also kept in contact with me throughout the year. Finally, I would like to thank Alex Vickers for his encouragement and his enthusiasm throughout the year.