STUDENT NUMBERS

Please make a note of the student number(s) of your child or children (or dependant) and quote the number in all correspondence with the University

The student number will take the form of two initial digits that denote the year, followed by a letter (usually the first letter of the surname; followed by a further four numbers that are unique for each student in that year.

Email address

This will take the form of: g followed by student number@campus.ru.ac.za

For example, g11A1234@campus.ru.ac.za

Notes

Faculty of Science

Parents' Orientation Handbook

2011

A welcome from the Dean

Thank you for choosing to send your child or dependant to study in the Faculty of Science at Rhodes University.

The transition from school to University can be very intimidating. The years at school were probably characterised by limited freedom and close supervision, by small classes, by limited options (academic, sporting and cultural) and by limited diversity. By contrast, at University there is considerable freedom, and supervision is not as close; some classes are small but many are very large; the options are enormous with hundreds of courses, numerous sporting codes and cultural groups, and our community is a diverse one. The years at school would have resulted in a familiarity with a particular way of doing things and a sense of belonging, and all of this will now change. Many students adapt quickly to the changed surroundings, structures and rules but some do not. For those who struggle, much support is available. Firstly, as parents and guardians, you have an important role to play and it is important to maintain communication with your children. However, you will be further away from your children than perhaps ever before and may feel unable to offer support when needed. On campus, support, guidance and advice are available from many different people. In residence support is available from wardens and sub-wardens and senior students, and the University has a Counselling Centre with trained staff. When the problem or concerns are academic, then guidance is available from Heads of Departments and from the Dean's Office. The Science Faculty has a full time Dean, supported by a part time Deputy Dean and full time Administrative Officer. We have offices in the Schönland Building and all students will be told that they are welcome at any time to visit the offices and if the Dean is not available, an appointment will be made. The same applies to parents and guardians who are equally welcome to visit the Dean. Although a great deal of support is available, it is important to note that the onus is on the students to seek help. This is an important part of the shift of responsibility from relying on others (parents, school teachers) to relying on oneself. At University we expect students to take ownership of their activities (academic and other); to enjoy the freedom that this can bring but also to accept that they are responsible for their actions.

The key to success at University is balance, and students who achieve this will have gained the most from their time at Rhodes. The education that we offer does not only occur in the lecture theatres and laboratories but on the sports fields, in the residences, within the societies and even in the pub. Students who concentrate solely on their academic studies in the narrowest sense may well end up with excellent results but we would argue that they have missed out on much of what Rhodes has to offer and have not achieved a balance. Equally, students who sacrifice their academic work for time on the sports field will not get the results

they deserve and they too will not have achieved a balance. Thus students are encouraged to explore the cultural diversity on campus, to participate in sport and to join one or more societies but this must not be at the expense of the academic studies. We are proud of the University slogan, “Where leaders learn” and believe that the development of leadership skills occurs at least as much outside the lecture theatre as inside.

Universities are complex structures embedded in complex societies, with conventions to learn and complicated rules to be understood and obeyed. This booklet aims to provide you with some idea of what goes on behind the scenes, to explain the set-up and some of the rules that apply to Science students at our university and, hopefully, to equip you to advise or help your child should the need arise.

This booklet consists partly of extracts from the detailed "Faculty Handbook" that is given to all students in the Faculty each year. Your feedback, or suggestions for improving it in future, will be very welcome.

Contact details for members of the Dean’s Office are:

Dean of Science: Professor Ric Bernard. Schönland Building, Botany Department.

Faculty Administrative Officer: Mrs Sandy Scrivener; 046 6037232; scisec@ru.ac.za FAX: 0466037033

Deputy Dean of Science: Professor Rosie Dorrington. Department of Biochemistry, Microbiology & Biotechnology. 046 6038442; r.dorrington@ru.ac.za

Ric Bernard Dean of Science February 2011

CONTENTS

The University and the Faculty

The academic life of the University is centred in various *Departments* which are staffed by *Professors, Associate Professors, Senior Lecturers, Lecturers* and *Junior Lecturers*. One of these (almost always a Professor) is the *Head of Department* and is responsible for providing leadership. Each department is responsible for its own teaching and research.

Related departments are grouped into *Faculties*. The Faculty of Science is a grouping of 13 academic departments which teach subjects such as Physics, Zoology and Chemistry, which are normally taken only in Science degrees. Some of the departments offer courses which may form part of an arts degree (such as Geography) and others offer courses that may form part of a commerce degree (such as Mathematics).

The 13 departments in the Science Faculty are:

Botany
Biochemistry, Microbiology & Biotechnology
Chemistry
Computer Science
Environmental Science
Geography
Geology
Human Kinetics & Ergonomics
Ichthyology & Fisheries Science
Mathematics, Pure and Applied
Physics
Statistics
Zoology & Entomology

Faculties are governed by a *Faculty Board*, a group of people drawn from the staff (and some students) of those departments involved in administering a degree. The Board is presided over by the *Dean of the Faculty*, a senior Professor elected in rotation by the members of the Board from their members.

The rules governing the award of our degrees are formulated by the members of the Board of the Faculty. Like most things in the University, they have to be approved by the *Senate*, the ultimate academic power bloc in the University, which is made up mostly of Professors, but also has members representing the Lecturers, the students, and various other interest groups, such as research institutes. The meetings of Senate are chaired by the *Vice-Chancellor* (Dr Saleem Badat).

Degrees in the Faculty of Science

The Science Faculty offers **FOUR UNDERGRADUATE DEGREES**

1. The **BSc** (Bachelor of Science) is the usual "first" degree in the Faculty, requiring a minimum of three years' study after school. A wide range of subjects - most of which are "scientific" in nature - can be studied in order to qualify for this award.

2. The **BSc(InfSys)** (Bachelor of Science (Information Systems)) is a 3 year degree intended for students who wish to become computer specialists in a commercial environment. It has a more rigid curriculum than the ordinary BSc degree.

3. The **BSc(SofDev)** (Bachelor of Science (Software Development)) is a 4 year degree intended for students who wish to become computer specialists in a software systems environment.

These degrees share a **similar basic structure**. In first year students take a range of courses that form the foundations for the subjects taken in second and third year. In second year, most students take 6 courses normally comprising three subjects and in third year students focus on two subjects which are called the major subjects. Through the three years there is an increase in focus, an increase in depth and complexity of the material covered and a decrease in the number of courses. The diagram on the next page will help you visualise this:

Year 1	Zoology 1				Chemistry 1		Geography 1	
	CEL 101	ZOO 101	CSC 1L1	BOT 102	CHE 101	CHE 102	EAR 101	GOG 102
Year 2	ZOO 201	ZOO 202	ENT 201	ENT 202	CHE 201	CHE 202		
Year 3	ZOO 301	ZOO 302	ENT 301	ENT 302				

In this example, the major subjects are zoology and entomology and this is built on a foundation that includes the same subjects at second year level and additional courses in chemistry, geography, computer science and botany. Some other examples are provided on pages 9-11.

In addition, it is possible to structure the typical three-year BSc over four years and this will be done for students who are not appropriate for the BScF and who performed poorly at school, or who struggle in the first semester.

The exact structure of the curriculum varies depending on the chosen degree and the major subjects and some more detail are presented later. **Please be assured that the students will receive extensive guidance on how to develop a curriculum.**

4. The **BScF** – (Extended Studies Programme) is a four year degree designed to allow access to the Science Faculty for students from disadvantaged (educational; socio-economic and other) backgrounds. In first year, these students do three specially designed courses, one in maths, one in computer literacy and an introduction to the concepts and methods of science. In second year, the students will take a selection of standard first year courses and in their third year, they join the BSc year two group and graduate with a BSc

Curriculum Planning and Subject choices for the BSc

Planning an overall curriculum or degree structure is the most important task that a student has to attempt in the first few days at Rhodes and they will be told as much. A great deal of assistance is available for this in the form of orientation talks and consultation sessions and it is CRUCIAL that they attend these sessions.

The curriculum choice for first year (and beyond) is of course just one part of career development as a whole, and guidance on this important topic will be available both during orientation week and throughout the year.

The structure of a BSc is essentially governed by the choice of major subjects, and we expect students to have some idea of what appeals to them by the time they arrive at the university. Many students naïvely make this initial choice simply to fit a set of preconceived career interests, or to fit in with the ambitions of their parents. While it is absolutely right that parents and guardians provide guidance and suggestions on careers, we urge you not to put too much pressure on your children to follow a certain path**. It is very important that the chosen curriculum reflects the student's interests AND abilities.** Paradoxically, major subjects do not have to be decided once and for all at the start of one's first year. Many students revise their original choice on the basis of experience gained in first year. For this reason, we advise students to select a set of first-year courses that should normally all lead directly to potential major subjects, and not to choose a set of subjects that hinder a proper development later on.

While it is true that a degree majoring in Mathematics and Statistics provides a more obvious base for a career as an Actuary than does a degree majoring in Zoology and Computer Science it is also the case that students learn very much more than just the theoretical content of their subjects. So, for example, our students will learn to access information from various sources, to read it critically, to analyse and synthesise and produce a coherent report that can be presented both in the written and spoken forms. These sorts of **generic** skills give our graduates adaptability and flexibility so that a student with a good BSc degree could well become a company director, stockbroker, entrepreneur, teacher, author, journalist, lawyer, Member of Parliament or film director, besides the initially obvious idea of scientist, technician or researcher.

Subject choices in the BSc degree

Subject choice in the BSc(InfSys) and BSc(SofDev) is limited and the following text applies to the BSc. At Rhodes, we offer a far wider choice of combinations than in many other South African universities but **not all combinations are possible** - some are ruled out because of time-table clashes. The subjects that can be taken as part of a BSc can be divided into one of two groups: A and B.

Group A is made up of subjects that are very naturally taken in BSc degrees (rather than in, say, a BCom):

Applied Mathematics, Applied Statistics, Biochemistry, Cell Biology, Botany, Chemistry, Computer Science, Earth Science, Economics, Entomology, Environmental Science, Geography, Geology, Human Kinetics & Ergonomics, Ichthyology, Mathematics, Mathematical Statistics, Microbiology, Physics, Statistics, Zoology.

Group B is made up of all other subjects, most of which fall more naturally into degrees offered in other faculties:

Accounting, Afrikaans, Anthropology, Art (in various options), Classical Civilization, Commercial Law, Drama, English, English Language and Linguistics, French, German, Chinese Studies, Greek, History, History and Appreciation of Music, Industrial Sociology, Information Systems, isiXhosa, Journalism & Media Studies, Latin, Legal Theory, Management, Music (in various options), Organizational Psychology, Philosophy, Political Science, Psychology, Sociology.

Many subjects are "three-year majors", meaning they are offered at first-, second- and third-year level. They can also be taken to first- or second-year level as part of a degree in which other subjects are the majors. A few subjects are "two-year majors", meaning that they are offered at second- and third-year level only. Usually a student has to take a related first-year level subject as an entrance qualification for a two-year major. For example, credit in Chemistry 1 is needed before one can register for Biochemistry 2. Many third-year or major courses also require a student to have taken specific courses at a lower level in related fields. For example, a Physics major requires credit in Mathematics 1 and 2.

The choice of major subjects, plus their prerequisite and ancillary subjects, will determine at least eight, usually twelve, and frequently more of the semester-credits, courses and subjects needed to make up a valid curriculum.

Both major subjects may be taken from Group A.

This is the usual situation. In this case the entire degree must be made up of at least 18 semester-credits:

> All 18 semester-credits may be chosen from Group A;
>
> Alternatively, at least 14 semester-credits must be chosen from Group A, and at most 4 semester-credits may be chosen from those offered by a *single department* in Group B.

One major subject (but not both) may be chosen from Group B.

This possibility may be unique to Rhodes University and allows a student to combine a science subject with a subject from another faculty. This allows very useful combinations such as law and science, journalism and science, or environmental science and anthropology. There are however constraints: the entire degree must be made up of at least 20 semester-credits and, apart from the credits needed to obtain the one major subject from Group B itself,

one may not count credit for any other courses chosen from this group. IF the major subject from Group B has a prescribed ancillary among the subjects in that group, credit may be obtained for that ancillary. This happens with a Management major and in Music.

As a further important constraint, Psychology may be taken in a BSc only if the intention is to major in the subject. This is because there are enormous numbers of BA and BSocSci students taking Psychology as essential parts of their degrees, and so the number of places in Psychology available to BSc students is severely limited.

The BSc(InfSys) and BSc(SofDev) degrees

These much more career-focussed degrees, unique to Rhodes, are intended for students who wish to become computer specialists in a technical, commercial or industrial environment. The normal degree structure consists of 20 semester- credits spread over three years. In the case of the BSc(SofDev) this is followed by a fourth year of specialization. The curricula are more restricted than for an ordinary BSc. They are, essentially, a mixture of "Science" and "Commerce" subjects, chosen so that students who move on from this degree into a commercial environment will know more about the technical aspects of computers than their contemporaries who have read for a BCom, while those who move into technical environments will understand the ways of business and the needs of Systems Analysts better than their contemporaries who have read for a BSc degree.

Some Specimen curricula

A very few sample curricula are shown below, in the hope that these will be of interest and assistance. *It must be stressed that these are not the only ones possible!* We will show many more possibilities to the students and give them as much guidance as necessary to ensure that they each develop a sensible curriculum.

A classic biological science degree might combine Botany and Zoology:

Year 1	Zoology 1		Physics PHY 1E1	Botany BOT 102	Chemistry 1		Geography 1	
	CEL 101	ZOO 101			CHE 101	CHE 102	EAR 101	GOG 102
Year 2	ZOO 201	ZOO 202	BOT 201	BOT 202	STA 101	CSC 1L		
Year 3	ZOO 301	ZOO 302	BOT 301	BOT 302	← Major Subjects			

This degree combines Microbiology and Biochemistry for a student interested in Biotechnology

Year 1	Chemistry CHE 101	CHE 102	Statistics STA 101	Botany BOT 102	Biology CEL 101	Zoology ZOO 101	Geography EAR 101	GOG 102
Year 2	Biochemistry BCH 201	BCH 202	Microbiology MIC 201	MIC 202	Zoology ZOO 201	ZOO 202		
Year 3	Biochemistry BCH 301	BCH 302	Microbiology MIC 301	MIC 302				

← Major subjects could be zoo/micro or zoo/bch

This degree might suit a student with an interest in marine life or the biology of fish.

Year 1	Physics PHY 1E1	Zoology ZOO 101	Chemistry CHE 101	CHE 102	Biology CEL 101	Botany BOT 102	Statistics STA 101	STA 102
Year 2	Zoology ZOO 201	ZOO 202	Ichthyology ICH 201	ICH 202	Botany BOT 102	BOT 202		
Year 3	Zoology ZOO 301	ZOO 302	Ichthyology ICTH301	ICH 302				

← Major subjects could be zoo/bot or ich/bot

The next degree will meet the needs of a numerate student with an interest in chemistry.

Year 1	Biology CEL 101	Zoology ZOO 101	Chemistry CHE 101	CHE 102	Physics PHY 1E1	PHY 1E2	Mathematics MAT 1C1	MAT 1C2
Year 2	Biochemistry BCH 201	BCH 202	Chemistry CHE 201	CHE 202	Microbiology MIC 301	MIC 202		
Year 3	Biochemistry BCH 301	BCH 302	Chemistry CHE 301	CHE 302				

← Major subjects could be mic/bch or che/mic

And this degree combines chemistry with physic and additional maths

Year 1	Physics PHY 101	PHY 102	Chemistry CHE 101	CHE 102	Mathematics MAT 1C1	MAT1C2	Computer Science CSC 101	CSC 102
Year 2	Physics PHY 201	PHY 202	Chemistry CHE 201	CHE 202	Maths & Applied maths 2 MAM 201	MAM202		
Year 3	Physics PHY 301	PHY 302	Chemistry CHE 301	CHE 302				

← Major subjects could be phy/map or che/map

This degree combines geography with environmental science

Year 1	Geography EAR 101	GOG 102	Anthropology 1 ANT 1 – all year		Biology CEL 101	Botany BOT 102	Chemistry CHE 101	CHE 102
Year 2	Geography GOG 201	GOG 202	Enviro. Scie. ENV 201	ENV 202	Botany BOT 201	BOT 202		
Year 3	Geography GOG 301	GOG 302	Enviro. Scie. ENV 301	ENV 302				

← Major subjects could be env/bot or gog/bot

Computer science is a popular major subject and can be combined with various other majors.

Year 1	Physics PHY 101	PHY 102	Computer Sci. CSC 101	CSC 102	Mathematics 1 MAT 1C1	MAT 1C2	Statistics STA 101	Electr. PHY 1E2
Year 2	Physics PHY 201	PHY 202	Computer Sci. CSC 201	CSC 202	Maths & Applied maths MAM 201	MAM 202		
Year 3	Physics PHY 301	PHY 302	Computer Sci. CSC 301	CSC 302	← Major subjects could be phy/map or map/csc			

It is possible to do a BSc with an enormous amount of mathematical content (and some Physics, which is closely related to Applied Mathematics).

Year 1	Mathematics MAT 1C1 MAT 1C2		Statistics STA 101 STA 102		Physics PHY 101 PHY 102	Computer Science CSC 101 CSC 102
Year 2	Maths & Applied maths MAM201 MAM 202		Mathematical Statistics MST 201 MST 202		Physics 2 PHY 201 PHY 202	
Year 3	Mathematics MAT 301	MAT 302	Mathematical Statistics MST 301 MST 302	← Major subjects could be mat/map or mst/map		

Some people prefer working with people or animals to working with machines or mathematics. Perhaps their interest is in Human Kinetics and Ergonomics - to study how the Body's machine functions:

Year 1	Biology CEL 101	Zoology ZOO 101	Human Kinetics & Ergo. HKE 101 HKE 102		Chemistry CHE 101 CHE 102	Geography EAR 101 GOG 102
Year 2	Zoology ZOO 201	ZOO 202	Human Kinetics & Ergo. HKE 201 HKE 202		Biochemistry BCH 201 BCH 202	Botany BOT 102
Year 3	Zoology ZOO 301	ZOO 302	Human Kinetics & Ergo. HKE 301 HKE 302			

In recent times several students have combined Legal Theory with Science, rather than only with Humanities or Commerce, and gone on to acquire the initials "BSc LLB" after their names before following specialised careers in Law. Here is a curriculum that might appeal to those who wish to become experts in Environmental Law:

Year 1	Legal Theory 1 Introduction Foundation	Biology CEL 101	Zoology ZOO 101	Physics PHY 1E1	Botany BOT 102	Chemistry CHE 101 CHE 102	
Year 2	Legal Theory 2 Various courses	Environmental Science ENV 201 ENV 202		Botany BOT 201 BOT 202		Geography EAR 101 GOG 102	
Year 3	Legal Theory 2 Various courses	Environmental Science ENV 301 ENV 302	← Major subjects could be law/bot				

The BSc(InfSys) degree and BSc(SofDev) degrees are rather more prescribed in what one can and cannot take. How a curriculum might be planned is best understood with reference to the following example which shows a classic three year BSc(InfSys) degree (or the first three years of the BSc(SofDev) degree) with the standard Computer Science major combined with the very popular Information Systems major.

Year 1	Computer Science 1 All year	Accounting 1 All year	Maths 1C All year		Management 1 All year	Economics 1 All year
Year 2	Computer Science CSC201 CSC202	Info. Systems INF201 INF202	Stats STA101	PHY1E2		
Year 3	Computer Science CSC301 CSC302	Info. Systems INF301 INF302				

In this degree, students take 10 semester credits in first year, comprising 4 full year subjects plus a year of Maths OR MAT 1C1 and PHY 1E2.

Progress (or lack of it!)

This section attempts to clarify various aspects of the rules that apply to a student's progress toward obtaining a Science degree.

While students - and, we feel sure, their parents - hope for a smooth ride through an undergraduate degree, about 40% of the BSc degrees finally awarded do not fit the curriculum patterns described earlier, usually because a student fails one or more courses and has to take an extra course in second or third year, or even an extra year or two to complete all the required courses.

If a student fails to complete at least six semester-credits by the end of first year, the prognosis is that the degree will take at least four years to complete.

In the worst case, students who are deemed by the Faculty Board to be making no real progress at all can be "excluded" from further study, a topic discussed in detail at the end of this section.

Academic Status

A BSc student is classified as a "first year student" until six semester-credits are obtained, and is classified as a "third year student" only when registered for at least one third-year course - which is possible only after at least ten semester-credits have been gained.

Science students are not allowed to start on a second-year course unless they have obtained at least six first-year semester-credits. Every year a small group of students appeal loudly against this rule (which does not apply in all faculties), but experience has shown that the best chance of success for these students is to spend another year completing the outstanding first year credits rather than trying to mix some second year and some first year subjects.

A major subject (in third year) cannot be taken along with more than two other courses (making a total of 6 semester credits in the final year). Some students who have done poorly think that they can mop up an enormous number of outstanding credits in their final year, but, again, experience has shown that attempts to do so always end in complete disaster, and so there is now a strict ruling against allowing a student to become overloaded.

Credit for a course

Credit for any course requires that the student scores an overall mark of at least 50%. Passes are graded into Class 1, 2A, 2B or 3, which equate to marks of at least 75%, 70%, 60% or 50% respectively.

Marks for practical and tutorial work often count directly towards a student's result for a course as a whole. In many courses the marks for tests and assignments written during the year also count towards the final assessment.

Aggregate passes and aggregated credit

In all subjects offered at a given level as a pair of semester-credit courses, if both credits are not obtained, an aggregate average of 50% in the pair may still be deemed equivalent to credit in a full 2-credit "aggregate pass" for that subject. Students who do not obtain credit in both components, but who meet the requirements of such an aggregate pass, have their academic transcript amended to show that "aggregated credit" has been achieved. At the discretion of the Department and the Faculty Board such credits may permit a student to proceed to the next year of study in the subject (an "ACR") or to earn a non-continuing credit ("NCR") that counts towards the degree but does not qualify the student to continue with that subject.

The calculation of aggregated credit normally takes place in December, and involves the marks awarded during that academic year only - that is, one cannot "aggregate" marks earned over two or more years of study.

Examination results

The end-of-year examination results are only released after they have been approved by the Faculty Board, who meet to consider these in about the second week of December. As soon as possible thereafter, students can be notified of their results in various ways - for example by accessing the University Web pages, or by arranging for an SMS message to be sent to them, or by telephoning a call centre.

Note that examination results are not released to students (or to their parents, or for that matter, to anyone else) if they are in arrears with fees. Furthermore, students who might have been awarded supplementary examinations (see below) or who have been excluded (see below) will not be told any of this news until their fees are paid.

DP certificates

In most departments there is a minimum attendance and performance requirement, certainly for practical work. Before students are allowed to write the qualifying examination in a course, they must earn a DP ("Duly Performed") certificate. Such certificates are never actually issued in paper form, as it happens, so don't ask to see one! "Losing a DP" - the term given to being forbidden from continuing in a course, or from writing the examination, usually because the student has not attended classes satisfactorily, or have done particularly badly in tests and assignments - is viewed in a very serious light when considering a student's progress through the system.

Aegrotat examinations

Students who are unable to attend an examination because of genuine ill-health, or for some other serious reason, such as the death of a member of their family, may be allowed to write another (equivalent) examination at a later time, known as an *aegrotat* examination. *Applications to sit such examinations are made in writing, on a prescribed form available from the Student Bureau, and must be supported by doctor's certificates or other proof that the request is genuine.*

Supplementary examinations

The pass mark for all courses in Science is 50%. Students who earn marks between 35% and 49% in first year subjects in June or between 45% and 49% in November are often (*but not automatically*) recommended by their Departments to be allowed to write a supplementary examination (a "supp") in November (for courses narrowly failed in June) or February (for courses narrowly failed in November), before the next year begins. The June qualifying mark is often lower than the November mark to accommodate students who might still be adjusting to the University environment in their first semester. Occasionally the November qualifying mark is set below the norm of 45%, although it is usually above the June level.

Sometimes an aggregate mark of 48% or 49% in both components of a first or second year course will earn a student a "non-continuing pass". In such cases, credit will be given, but the student may not proceed to the next level course in that particular subject until the course is repeated and passed properly.

It is important to note that

* Supplementary examinations are *not* simply awarded automatically if one has an aggregate or component mark of at least 45%.

* The Faculty Board has discretion over the final award of supplementary examinations. No restrictions are usually placed on the number of supplementary examinations that a student will be allowed to write for first semester initial courses. For second semester courses and non-initial courses (where such supplementaries may occasionally be offered) students must have obtained at least four semester-credits by November of their first year to qualify for any supplementaries for November examinations.

* In the Faculty of Science, supplementary examinations are *not* awarded to students who have been excluded (see later).

* Supplementary examinations are almost never recommended for second and third year subjects in any Faculty.

* A fee is charged for each supplementary examination written in January.

Exclusion from the University for Poor Performance

The University has a rule that is applied to students whose academic results are unsatisfactory, whereby they may be "excluded", and prevented from registering at Rhodes in a subsequent year. As applied to Science students, "G.7" specifies that:

* one must have four semester-credits by the end of the first year of study;
* one must have eight semester-credits by the end of the second year of study;
* one must have twelve semester-credits by the end of the third year of study, and of these, four at least must be second-year or third-year credits;
* besides this, one must make "satisfactory progress", which means that one should pass at least half of one's courses each year;

* one may not take longer than five years to complete the degree;
* students on an Extended Programme must have an average of 60% for all courses.

First time students who earn no credit (or only one or two semester-credits) are the prime candidates for exclusion.

Academic Exclusion - the formal process

After the examinations have been marked, the situations of students who do not satisfy Rule G.7 are considered very carefully by the Dean and the Deputy Dean. They look at as many factors as they can - such as how they had performed in the June examinations, whether they were carrying full loads of courses, whether advice had been given to such students earlier about reducing courses, whether this advice had been taken, or whether they had earned all their DP certificates.

At the end of the year the Dean and Deputy Dean then submit recommendations on each student to a special meeting of the Faculty Board - that is, to the entire collected staff of the Science Faculty - for their comment and approval. It is largely because of all this detailed checking and consultation that exam results are not released earlier. At the meeting, members of staff often ask for other factors to be considered - perhaps drawing attention to students who have performed badly because of having problems or illnesses earlier in the year.

It is our goal to see students succeed rather than fail, especially as we recognize the need the country has for qualified scientists, and every possible chance to continue is given to students whom we believe have the potential to succeed. Only students whom we believe have no chance of success are excluded.

Students who fail very badly in the June examinations

Unfortunately, every year a small but significant number of students fail so badly in June that there is very little chance of meeting the requirements of G7 in November. In such cases the Science Faculty will do the following:

* If all courses are failed in June the student will be advised to withdraw.

* If one or two courses are failed, the student will be required to meet the Dean and discuss progress. It is possible that the course load in the second semester will be reduced in an effort to ensure some success although this may mean that an additional year will be required. These students will be put on academic probation requiring them to achieve certain goals in November. **We urge parents to support us when a reduced load is suggested, even if this may result in the student requiring another year at Rhodes, as this will be done in the very best interests of the student**.

Academic Exclusion - the right of appeal

Students who are excluded are notified of this in an exclusion letter sent out over the signature of the Registrar. Such students have the right to appeal against their exclusion, **in writing (on a prescribed form, or by submitting a web-based form)**, to the Registrar. He will then discuss the case with the Dean, who, in turn, may recommend to the Registrar that

they be readmitted "on probation". Since the cases have already been very carefully considered by the Dean and the Board, the original decision is usually, but not always, upheld. If a student can provide a good motivation, the request may succeed, but in our experience, the motivations put forward are usually very weak. It should go without saying that a student who repeatedly performs badly - in particular, fails to comply with Rule G.7 at the end of the second or third year at Rhodes University, or has been excluded or put on probation before - is treated with even less sympathy.

Attention is drawn to the need to appeal in writing - verbal and telephonic appeals are unacceptable. Sadly, if understandably, students who are excluded (and often their parents) hope that if they telephone or argue with enough staff they will eventually be able to reverse a decision, often after the first appeal has been carefully considered. Please do not do this!

Financial Exclusion

Students who are badly in arrears with fees are usually not permitted to write examinations. In extreme cases a student may be excluded from the University on financial grounds - a situation that is totally different from being excluded on academic grounds. *If you are having financial problems, consult the student fees office or the Registrar (Finance) as soon as possible.*

Answers to common questions

There are many strange new words to learn in an academic environment. Here are explanations of a few of them:

What is a "semester"?

The academic year is divided into two semesters. The first semester starts in February and ends with the examinations in June; the second semester starts in July and ends with the examinations in November.

What is an "academic transcript"?

This is a summary of the courses that a student has studied, and of the marks earned for each of these courses. If you need one, enquire at the Student Bureau.

What is "leave of absence"?

Many departments have strict rules about attending classes and handing in assignments. A student who is ill, or has to be away from the University for any genuine reason, and so needs to miss classes, should apply for leave of absence from the head of each department in which he or she is studying. This is done on a standard form available from departments or residences, and one is required to state (and to back up) the reason for absence. Leave of absence is not usually given for sporting or social reasons. Many departments grant leave of absence only after insisting that the student catch up work that is missed, and require assignments to be handed in anyway.

What is an "extended DP"?

Sometimes a student who has failed a course is allowed to rewrite the examinations in the course in the following year, without actually attending all the lectures and practicals for a second time. This is known as "writing on an extended DP". *It is our experience that attempts to complete courses in this way are usually unsuccessful.*

What does it mean to "obtain a distinction"?

If a student obtains a first class pass (75% or better, averaged over the various components) in a major subject, or for an Honours degree, then he or she is said to have earned a distinction in that subject, and the degree certificate records this.

What is "plagiarism"?

Plagiarism refers to the (unacceptable) practice of presenting as your own work material which has been written by someone else. Any use of material that is derived from the work of another person constitutes plagiarism, unless the source is clearly acknowledged. Students are guilty of plagiarism if, for example, they hand in an assignment under their own name which, either in part or as a whole,

* is copied from a document downloaded from a website;
* is copied from a published article or book chapter;
* is copied from an essay, computer program or practical report written by another student;
* has been written for them by someone else.

Unfortunately the incidence of this sort of behaviour has increased in recent times, partly because electronic access to data has made it so easy. **Nevertheless, the penalties for plagiarism (or other forms of cheating) are severe**. They range from giving a warning (for first time and minor offences), to imposing a mark penalty, and, in serious cases, to withdrawing the student's DP, imposing a fine, rustication or even expulsion from the University. You can read the full University policy on plagiarism at
`http://www.scifac.ru.ac.za/plagiarism_policy.pdf`

Classes and courses

How are classes conducted?

Courses in the University, and in particular in the Faculty of Science, are given and assessed through a mixture of the following:

* **Lectures**: Most science courses have one lecture each day, which students are expected to attend. The lecture is the main vehicle used to put across course material. It takes the form of an address on an aspect of the subject by a member of the academic staff. (Material covered in lectures is seldom "revised", as it would be at school.)

* **Practicals**: Virtually all Science departments stress the value and necessity of conducting experiments in laboratory situations. For these the class may be divided into smaller groups,

because few departments have a single laboratory large enough to house the entire class, or the funds to provide equipment for all the members to use simultaneously. Once the experiments have been done, students are usually expected to prepare reports on their findings. These are then assessed, and the marks form part of the student's assessment for the year.

* **Tutorials**: A lecture tends to be characterized by the lecturer doing all the talking. In tutorials, on the other hand, the class is usually divided into smaller groups, each one under the supervision of a staff member or senior graduate student. Problems are usually posed some time before the tutorial commences; students are expected to have tried to solve them before the group meets, and the tutorial then takes the form of a discussion of the problems, with every member of the group encouraged to participate.

* **On-line tutorials**: Increasingly, departments supplement formal face-to-face contact with the use of on-line computer-based material, using systems such as "Moodle".

* **Tests**: Departments hold regular tests to allow staff and students to measure their progress and understanding. Marks for tests usually form a component of the student's overall assessment for credit, and attendance at tests is compulsory.

* **Examinations**: The most crucial part of the assessment of a student is done through the formal examinations held in June and November, and it is impossible to obtain credit for a course unless these examinations are taken.

Can one take more than the standard number of courses for a degree?

The simple answer is yes, although usually it is only above average students that do so. There are restrictions on the total number of courses that may be taken in a year - ten semester-credits in the case of a first year student, and six semester-credits in the case of a final year student. (In both cases this represents one more "subject" than the normal load). Provided that these restrictions are met, there is no extra charge for taking an extra course within a given year.

What is the earliest stage at which second and third year courses may be taken?

Other Faculties have different rules, but Science students are not permitted to take any second year level courses until they have obtained at least six semester-credits of first year level courses, and they are not allowed to take any third year level courses until they have obtained at least ten semester-credits. Fairly obviously, one cannot take any second or third year level course without having obtained the prerequisite first or second year level credits for that subject.

Can credits earned at another university count towards a Rhodes degree?

For a Rhodes degree to be earned, at least half of the credits - and in particular for the major subjects - must have been earned at Rhodes University. Most departments at Rhodes are prepared to recommend that a student get credit for at least some *first year* courses passed elsewhere, provided that the course is also offered at Rhodes, and is deemed to cover essentially the same material as the Rhodes course, and at the same sort of level. One is

unlikely to be granted a credit in Archaeology, for example, but might well be allowed to count a UNISA or UCT credit in Chemistry or Mathematics.

What options are open to students who took Mathematical Literacy on the NSC or obtained a Standard Grade pass in Maths at Matric?

We have found over the years that students who do not pass maths on the NSC, or maths at the higher grade at school invariably fail mathematics at university. Students who fall into this category are strongly advised not to attempt to study Mathematics, Chemistry, Computer Science, Statistics, or Physics as major subjects. The options, therefore, are to choose as major subjects Biochemistry, Botany, Entomology, Environmental Science, Geography, Geology, Ichthyology, Microbiology or Zoology. Students who require maths for their degree may be required to register for the remedial course Maths 1L as an *extra* credit.

Can one get into the Pharmacy Faculty by doing an appropriate first year curriculum, and then transferring from Science to Pharmacy?

The answer, in principle, is yes, but the chances of actually being allowed to do so are slim. Competition for places in Pharmacy is very keen, and unless one passes **all** of one's first year courses **outright** and very well indeed, one is unlikely to be allowed to transfer. There is another risk involved: the standard first year Pharmacy curriculum - Chemistry 1, Physics 1E1, Computer Science 1L, Cell Biology 101, Zoology 101, Maths 1P, Statistics 101 - while comprised of credits that are all acceptable in a BSc, does not really lay a foundation with many options for a regular BSc.

What is the difference between doing a BSc(InfSys) or BSc(SofDev) degree and a BCom majoring in Information Systems?

The BSc(InfSys) or BSc(SofDev) degrees afford the best opportunity to major in both Computer Science *and* Information Systems, and provide a student with the most intensive preparation for a general career in Information Technology in both technical and management components. The BCom degree provides less technical content, and rather more "commercial" background in Management, Accounting and Law.

If one fails an exam, can one ask for the papers to be marked afresh?

In the Science Faculty remarking of scripts on demand is not allowed. Rest assured that every precaution is taken to mark papers accurately and fairly. Students whose results come within a few percent of passing are invariably remarked internally in any case. For senior examinations the marking and the marks are subject to the scrutiny of an external examiner. One may apply, through the Examinations Office, for exam marks to be recounted, but this is really not worth the money it costs to do so.

Timetable problems

How does one check that a curriculum is viable with respect to the timetable?

The University Timetable is a fairly complex document! Probably the best course of action, where possible, is to visit the Science Faculty Web site at

(http://scifac.ru.ac.za/wwwtime/timetable.php)

where one can find, not only the document itself, but also an easy to use interactive system that allows one to select subjects easily and explore whether they fit together.

Which combinations cause timetable clashes?

So far as major subjects are concerned, severe clashes presently exist between the following subjects (meaning that it is not possible easily to plan a curriculum in which two subjects are both chosen from a single one of the following five groups):

* Computer Science, Geography, Ichthyology, Microbiology, Legal Theory, Drama;
* Chemistry, Environmental Science, Mathematical Statistics, Journalism, Accounting, Music;
* Biochemistry, Geology, Entomology, Information Systems, Applied Maths, Philosophy, Anthropology;
* Zoology, Economics, Psychology, Industrial Psychology, Mathematics, Ethnomusicology;
* Botany, Physics, Human Kinetics and Ergonomics, Linguistics, Management.

How does one handle a combination of subjects that results in timetable clashes?

The lecture timetable has been carefully designed so that most subjects either clash "every time" or "not at all". It is clearly preferable to choose subjects that do not clash at all. Indeed, the Dean will not usually allow any student to register for courses that clash more than once a week. Students who really want to pursue curricula that result in serious clashes will be advised to spend at least one extra year over the degree so as to find an arrangement that avoids clashes.

How flexible is the timetable?

The timetable is fixed and cannot be altered to meet the needs of individual students.

Financial matters

We are having problems paying fees. What are our options?

Financial matters are not dealt with by the Dean. If you are having problems, the way forward is to contact the Fees Office, or the Registrar of Finance as soon as possible.

Note that examination results are not released to students who are in arrears with fees. Furthermore, students who might have been awarded supplementary examinations or who have been excluded will not be told of this until their fees are paid.

What is a "merit bursary"?

South African students who obtain exceptionally good NSC/matric results are usually offered scholarships to offset their academic fees at the University. These scholarships are for the first year only. However, once here, all students who obtain first class passes in all, or nearly

all, of their subjects may be entitled to a merit bursary for the following year. In the best case this amounts to a discount of 50% off the academic fees. This can make an enormous difference to the overall cost of providing your child's education!

Is there other Financial Aid available to needy students?

For needy South African nationals, financial assistance is available through various schemes administered by the University on the donors' behalf. For further details please contact the financial aid administrator, using one of the addresses given at the end of this booklet. Sadly there is no financial aid available to foreign students.

Textbooks

How do students find out what textbooks they need?

Most departments issue a list of these, display a list on their notice board, or announce them during the first lectures of a course. Don't rely on what other students say - the advice may be out of date, since textbooks change from year to year.

Where does one buy textbooks?

The main bookseller in Grahamstown that carries stocks of new Rhodes textbooks is Van Schaik Bookstore, just down the High Street from the Drostdy Arch (in the old UPB shop). Sometimes one can buy second-hand textbooks from a student who took the course in previous years, or from other booksellers like Fables, but make sure to get up-to-date books and editions!

We have heard that some departments issue handouts and notes. Is this true?

Many departments do this, and add a charge for them to the student's university account. This can amount to somewhere between R50 and R200 per course.

Computers

Do students need to have their own computers to do a BSc?

While it is useful to have one's own one computer, it is not essential. Rhodes has particularly good public computer facilities, available to students around the clock.

Does one have to pay extra to use the computer facilities?

Students registered for Computer Science and Information Systems pay a small additional levy to provide funds to keep their laboratories at the cutting edge. The levy simply forms an extra part of their student fees for the year. A similar levy applies to Journalism students, whose state-of-the-art equipment is also very expensive. While access to computers, to e-mail, to the Web, and to the news groups is free to all students, they have to pay a small amount per page to use laser printers if they want to produce high quality printouts of essays.

Can students get help in learning to use a computer?

Computer Science 1L is an in-depth literacy course that many students find useful - and it earns them credit. The student based Computer Users' Society (RUCUS) has its own server on the network, and runs orientation courses at regular intervals.

Can privately owned computers be connected to the university network?

YES. All required information is available at http://www.ru.ac.za/studentnetworking

What will my child's e-mail address be?

Each student has an e-mail address of the form **g11A1234@campus.ru.ac.za** (where the "11A1234" in the example following the "g" is simply the "student number").

Students who are feeling lost

My child is having trouble adjusting to University life. Who can help us?

This is not uncommon and, fortunately, there are many people to turn to. For problems with academic work, remember that all the staff were once students themselves, will remember some of the bewilderment that they faced at that stage, and will handle genuine pleas for help sympathetically. Students who are having trouble deciding on their curricula should approach the Dean, Deputy Dean or the Careers Adviser. Students who are having social or personal problems should be encouraged to discuss them with their Residence Warden, or with the trained counsellors in the Counselling Centre. Finally, the SRC (Students' Representative Council) publishes an extremely valuable "Student Services Booklet", detailing where to find help on travel, medical care, psychological problems, financial aid, legal problems, security, and harassment.

Useful contact addresses and telephone numbers

Dean of Science: Professor Ric Bernard, Schönland Building, Botany Department
Phone: (046) 603-7232; e-mail: scisec@ru.ac.za

Deputy Dean of Science: Professor Rosie Dorrington, Department of Biochemistry, Microbiology & Biotechnology; Phone: (046) 603-8442; FAX: (046) 622-3984 e-mail; r.dorrington@ru.ac.za

Faculty Administrative Officer: Mrs Sandy Scrivener, Schönland Building, Botany Department. Phone (046) 603 7232; email: sciesec@ru.ac.za; FAX: (046) 603-7033

Science Extended Programme Coordinator: Mrs Karen Ellery, ADC
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Registrar: Dr Stephen Fourie, Registrar's Division
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Admissions Officer: Mrs Desiree Wicks, Registrar's Division
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Dean of Students: Professor Vivian de Klerk, Dean of Students Division
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Financial Aid Administrator, Registrar's Division
Phone: (046) 603-8248 FAX: (046) 603-8300 e-mail: finaid@ru.ac.za

Student Careers Adviser: Mr Jurgen Kietzmann, Careers Centre
Phone: (046) 603-8180 FAX: (046) 603-8197 e-mail: j.kietzmann@ru.ac.za

University Switchboard: Phone (046) 603-8111

If you have Internet access, visit the Faculty Home Page: http://www.scifac.ru.ac.za