

**THE CONTENT OF THE UNDERGRADUATE COURSES PRESENTED BY  
ECONOMICS DEPARTMENTS AT SOUTH AFRICAN UNIVERSITIES**

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(Work-in-progress)**

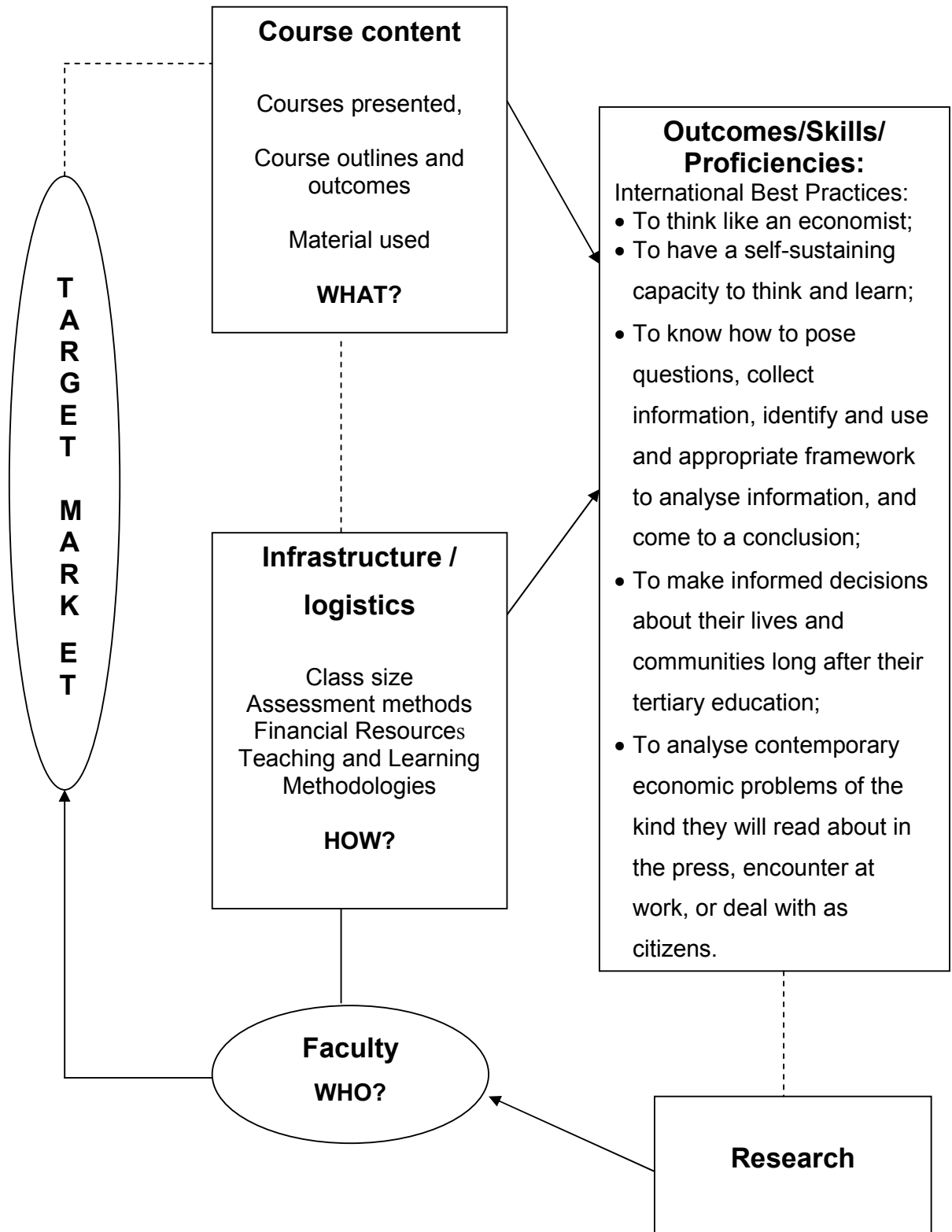
**1. INTRODUCTION**

The state of Economics teaching and research has been widely researched over the last few decades. These studies focus on the following topics:

- determining the purpose of the Economics major and the proficiencies or skills needed by graduating Economics majors (Hansen, 1986:149-151; Siegfried *et al.*, 1991: 197-223),
- course content and structure (Siegfried *et al.*, 1991:197-223; Siegfried and Wilkinson, 1982: 125-138),
- ranking of economic departments based on their research output. Such studies have been conducted in the United States (see Dusansky and Vernon, 1998:157-170), Canada (see Lucas, 1995:945-961), Europe (see Kalaitzidakis and Mamuneas, 1999:70- 75), United Kingdom (see Payne and Coupe, 2000:85), Australia (Harris, 1990:249-260). Coupe (2003) provides a comprehensive ranking of economic departments worldwide,
- ranking of economics departments based on their academic excellence is performed in the United States. The U.S. News and World Report yearly publishes a book called “America’s Best Colleges” providing information on how programmes compare, in which areas various departments specialize, what the strengths and weaknesses of each department are, etc., and
- assessing the teaching of economics, class sizes (Becker, 1997:1347-1373; Bartlett and King, 1990:181-193; Siegfried and Fels, 1979:923-969; Becker and Watts, 1999:344-349; Becker and Watts, 1996:448-453) and faculty workload and support (Dearden *et al.*, 2001:387-396).

The following diagram (diagram 1) puts the whole picture into perspective:

Diagram 1:



## 2. MOTIVATION FOR THIS STUDY

Relatively little research has been done in this field in South Africa. In a study by Luiz (2004:187-206) he addresses a broad range of issues to assess the state of Economics at South African Universities under which staff qualifications, student numbers and research output. He also touched on courses and curricula by giving information on whether or not Honours, Masters and PhD programmes are offered by the participating Economic Departments and giving the number of students doing core courses in Economics (Macroeconomics, Microeconomics and Econometrics). Luiz states that South African Economics Departments offer very heterogeneous products. This is particularly problematic when assessing student applications from other universities, as Economic departments at Universities in South Africa generally have very little knowledge of what is happening at other institutions. In conclusion Luiz states that he did not address details about course curricula but that it would be an important next step.

Apart from filling this gap to assist the heads of Economic departments and decision makers within Economic departments, it is also pertinent to analyse the syllabi of Economic courses for several other reasons:

- The Higher Education Quality Committee is in the process of evaluating all South African Tertiary Institutions to ensure quality within higher education and training.
- Faculty can compare the content and standard of the courses they are presenting to other institutions in the country and make informed decisions if considering amendment to courses.
- In deciding which department or school to attend, future students want to make an informed choice. In other countries, such as the United States of America, there is more information available on how programmes compare, which areas various departments specialize in, what the strengths and weaknesses of each department are etc. All this information is given in a yearly publication of a book

called “America’s Best Colleges” that are published by the U.S. News and World Report. In South African there is, apart from Luiz’s study, very little information for students to make informed choices.

### **3. RESEARCH GOALS**

The main objective of this study is to determine what the content of the undergraduate courses presented by selected Economics Departments at South African universities is.

This paper has the following objectives:

- 1) Formulating the goals of an Economics major and the skills required to achieve these goals, from international literature.
- 2) Determining what courses each of the selected Economics departments offer.
- 3) Determining on what year level each of the courses are taught
- 4) Supplying information on how many semesters are assigned to each course.
- 5) Identifying the niche / target market of some of the Economics Departments.

### **4. GOALS OF AND SKILLS REQUIRED: LITERATURE OVERVIEW**

#### **4.1 The goals of an Economics major**

Siegfried *et al.* (1991:199) states that the main goal of an Economics major is to teach students how to think like Economists. This means that graduates should be able to:

- use chains of deductive reasoning together with simplified models to help understand economic events. The simplified models include supply and demand, marginal analysis, benefit-cost analysis and comparative advantage;
- identify tradeoffs, given certain constraints;
- distinguish positive from normative analysis;
- identify and abstracting the behavioural implications of some change in the economy from other real-life situations;
- explore the consequences of aggregation;

- describe the redistributive implications of changes in economic institutions and policies;
- collect data to evaluate and refine his/her understanding of the economy;
- test alternative hypotheses about how consumers and producers make economic choices and how the economic system works.

#### 4.2 Skills required to achieve these goals

The American Economic Association's Commission on Graduate Study in Economics has identified seven skills that reflect the essential competencies of economists (Siegfried *et al.*, 1991:220):

1. analytics;
2. critical judgement;
3. mathematics;
4. computation;
5. application;
6. communication; and
7. creativity.

Siegfried *et al.* (1991:199-201) has also classified skills needed into two categories, namely problem-solving skills and creative skills.

##### **Problem-solving skills:**

Problem-solving skills can be defined as analytical reasoning using the techniques and principles of economics, which increases understanding of economic behaviour, and improve a student's ability to predict the consequences of changes in economic forces.

It involves:

- deductive reasoning
- models that focus on the more important behavioural relationships in our complex world;
- fundamental principles of economics;
- decision making techniques. This involves the examination of tradeoffs; measuring the costs and benefits of one choice in terms of another (opportunity cost);

formulations involving constrained maximization with carefully specifies constraints (due to scarcity); issues relating to efficiency, getting the most out of limited resources.

- an analytical approach.

The central goal of the development of problem-solving skills is understanding economic relationships. This involves:

- formulating hypotheses to explain these relationships;
- constructing modules that capture their essential features;
- assembling empirical observations bearing on these relationships; and
- testing the hypotheses using quantitative techniques.

### **Creative skills:**

Creative skills help to determine how to frame questions, what tools and principles apply to a particular problem, what data and information are pertinent to those problems and how to understand or explain surprising or unexpected results.

Creative skills involves:

- identifying economic problems;
- framing them in ways other people do not see;
- devising policy proposals to deal with problems;
- analysing both the intended and unintended effects of policies; and
- devising models to estimate the magnitude of these effects.
- understanding complex economic problems and deducting it into manageable components. This requires sophisticated analysis and extensive practice and training.
- creative judgement - specification of constraints and the articulation of a strategy to manage best within those constrains.

Hansen (1986:150-151) listed the following skills/proficiencies from his own experience and responses to surveys of graduated majors and conversations with employers, faculty and high-level executives in business and government:

#### **1. *Gaining access to existing knowledge***

This involves locating published research in economics and related fields;  
locating information on particular topics in economics and searching out

economic data and information about the meaning of the data and how they are derived.

2. *Displaying command of existing knowledge*

This includes for example summarizing what is known about a current condition in the economy or the current controversy in the economics literature. Explaining key economic concepts and describe how they can be used.

3. *Displaying ability to draw out existing knowledge*

This can be achieved by asking students to do for example the following: Write a précis of a published journal article; read and interpret a theoretical analysis, including simple mathematical derivations, reported in an economics journal article; read and interpret a quantitative analysis, including regression results, reported in an economics journal article; show what economic concepts and principles are used in economic analyses published in articles from daily newspapers and weekly magazines.

4. *Utilizing existing knowledge to explore issues*

This can be achieved by asking students to prepare a written analysis of a current economic problem or to prepare a decision memorandum for a superior that recommends some action on an economic decision faced by the organization.

5. *Creating new knowledge*

This involves identify and formulating a question or series of questions about some economic issue that will facilitate investigation of the issue; preparing research proposals and completing a research study whose results are contained in a polished 20 page paper.

The main objectives of the economics major can now be summarized as follows:

Students should be able to:

- have a self-sustaining capacity to think and learn;
- know how to pose questions, collect information, identify and use and appropriate framework to analyse information, and come to a conclusion;
- make informed decisions about their lives and communities long after their tertiary education;

- analyse contemporary economic problems of the kind they will read about in the press, encounter at work, or deal with as citizens.

#### **4.3 Course content, infrastructure, faculty, research and target market.**

The question is now, how can the achievement of these goals be facilitated?

We have identified two main sources facilitating the achievement of the goals stipulated above, namely the content of Economics courses (what is taught) and the logistics behind it (how it is taught).

The logistics and infrastructure involves class sizes, teaching methods, assessment methods, financial resources, etc. This is directly dependent on the faculty - faculty workload (research and lecturing) and faculty support (academic assistants and secretarial support). Research has a considerable impact on faculty members because it forms part of faculty's workload to meet certain research targets / expectations.

Research is also included in the goals of an Economics major and the skills needed to achieve those goals (see diagram 1).

The courses offered by a particular academic institution also determine that institution's target market. If an institution offers a subject many other institutions doesn't and/or makes sure to recruit specialists in the field, its marketing, target market and employed faculty will reflect that specialization field (see diagram 1).

In this study, the focus is on the content of courses offered by Economics Departments at selected South African Universities.

## **5. METHOD OF RESEARCH**

Information gathered consists of the names of courses presented by each of the Economics Departments, the year level on which they are presented and the number semesters assigned to it.

This information is obtained firstly by using open sources like Economic department's websites and faculty yearbooks of South African universities. This is followed by a gap-analysis performed by a focus group where the information still required is identified. The focus group consists of the programme leaders at the School for Economics, Risk Management and International Trade at the Potchefstroom campus of the North West University. The presentation of this paper at the Economic Society of South Africa's conference in Durban, 7-9 September 2005 will be an attempt to inform Heads of Departments and Faculty about the study. Furthermore suggestions can be made and the information gathered from websites and yearbooks can be checked to ensure that data is accurate. Any information still required will be asked from the different departments. An opportunity will be given to the heads of Departments from which no information could be retrieved from open sources, to provide us with the information if they would like to be included in the study.

When all required information is gathered and updated it will be analysed, compared and tabularised. The information obtained will then be used to inform Heads of Departments, Faculty and Students about the courses and it's content offered by those Economics Departments at South African universities from which sufficient information could be obtained.

## **6. RESULTS: COURSE CONTENT**

### **6.1 The Economics courses**

Table 1: The Economics courses presented at selected Economics departments in South Africa

Name of the course	Year	U CT	WI TS	U S	UP	KZN	UNISA	JHB	Rh o d e s	Free State	N WU: Potch & Vaal Triangle	NWU: Mafi-keng	NMMU	UWC	Venda
Economics for non-specialists	1st														
	2nd														
	3rd														
Introductory Economics	1st														
	2nd														
	3rd														
1st level Micro-Economics	1st														
	2nd														
	3rd														
1st level Macro-Economics	1st														
	2nd														
	3rd														
2nd level Micro-Economics	1st														
	2nd														

Name of the course	Year	UCT	WI TS	U S	UP	KZN	UNISA	JHB	Rh o d e s	Free State	N WU: Potch & Vaal Triangle	NWU: Mafikeng	NMMU	UWC	Venda
2nd level Macro-Economics	1st														
	2nd	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	3rd														
3rd level Micro-Economics	1st														
	2nd														
	3rd	■	■	■					#					■	
3rd level Macro-Economics	1st														
	2nd														
	3rd	■	■	■		■			#			*		■	
Labour Economics	1st														
	2nd						■							■	
	3rd	■	■	■		■				■	■		*	■	■

Name of the course	Year	U CT	WI TS	U S	UP	KZN	UNISA	JHB	Rh o d es	Free State	NWU: Potch & Vaal Triangle	NWU: Mafikeng	N MM U	UWC	Venda
Development Economics	1st														
	2nd														
	3rd											*			
Public Sector Economics	1st														
	2nd														
	3rd								#			*			
Economic policy	1st														
	2nd														
	3rd														
Inter-national Economics	1st														
	2nd														
	3rd								#			*			
												*			

Name of the course	Year	U CT	WI TS	U S	UP	KZN	UNISA	JHB	Rhodes	Free State	NWU: Potch & Vaal Triangle	NWU: Mafikeng	NMMU	UWC	Venda
Economic history	1st														
	2nd														
	3rd								#						
Current Economic questions	1st														
	2nd														
	3rd														
SA Economic Indicators	1st														
	2nd														
	3rd														
Finance / Financial Markets	1st														
	2nd														
	3rd														

Name of the course	Year	U CT	WI TS	U S	UP	KZN	UNISA	JHB	Rh o d e s	Free State	N WU: Potch & Vaal Triangle	NWU: Mafi-keng	N M M U	UWC	Venda
Monetary Economics	1st														
	2nd														
	3rd														
Bank Risk-Management	1st														
	2nd														
	3rd														
Economic Growth theories	1st														
	2nd														
	3rd														
Cooperation and competition	1st														
	2nd														
	3rd														

Name of the course	Year	UCT	WITS	US	UP	KZN	UNISA	JHB	Rhodes	Free State	NWU: Potch & Vaal Triangle	NWU: Mafikeng	NMMU	UWC	Venda
Comparative Economics	1st														
	2nd														
	3rd											*			
Management Economics	1st														
	2nd														
	3rd														
Industrial Economics	1st														
	2nd														
	3rd														
Natural Resource / Environmental Economics	1st														
	2nd														
	3rd														

Name of the course	Year	U CT	WI TS	U S	UP	KZN	UNISA	JHB	Rh o d e s	Free State	N WU: Potch & Vaal Triangle	NWU: Mafi-keng	N M M U	UWC	Venda
Economics of tourism	1st														
	2nd														
	3rd														
The Economies of Africa	1st														
	2nd														
	3rd														
Economic Planning	1st														
	2nd														
	3rd														
Economic Analysis	1st														
	2nd														
	3rd														

Name of the course	Year	UCT	WI TS	U S	UP	KZN	UNISA	JHB	Rh o d es	Free State	N WU: Potch & Vaal Triangle	NWU: Mafi-keng	NMMU	UWC	Venda
Welfare State Economics	1st														
	2nd														
	3rd														

## 6.2 The quantitative Economics courses

Table 2: Quantitative Economics courses presented at selected Economic departments in South Africa

Name of the course	Year	U CT	W I T S	U S	UP	KZN	UNISA	JHB	Rhodes	Free State	N WU: Potch & Vaal Triangle	NWU: Mafi-keng	NMMU	UWC	Venda
Econometrics/ Quantitative methods	1st														
	2nd				^										
	3rd				^				#				*		
Mathematics for Economists	1st														
	2nd				^										
	3rd				^				#						
Statistics for Economists	1st														
	2nd														
	3rd														

NOTE THAT EACH BLOCK REPRESENTS ONE SEMESTER AND THAT THE TWO BLOCKS FOR EACH YEAR **DOES NOT** REPRESENT THE 1ST AND THE SECOND SEMESTER, BUT JUST TWO SEMESTERS. THIS MEANS THAT IF, FOR EXAMPLE THE FIRST BLOCK IN THE THIRD YEAR IS SHADED, IT DOES NOT NECESSARILY MEANS THAT THE COURSE IS PRESENTED IN THE FIRST SEMESTER OF THE THIRD YEAR, BUT ONLY MEANS THAT THE COURSE'S DURATION IS ONE SEMESTER (FIRST OR SECOND SEMESTER)

- ^ Included in the course content of 2nd level Micro- and Macroeconomics
- # Rhodes university offers 8, 1/2 credit, structured courses in the third year. If students only take Economics 3 they have to choose 4 subjects (two per semester). If Economics 3 and Economics 3B is taken 6 courses must be chosen. There is also a 9th course that can be chosen that includes any approved paper
- \* The Nelson Mandela Metropolitan University offers 8 half-semester courses in the third year - four in the first semester and four in the second.

From table 1 and table 2 can be seen that:

All Economics departments at the South African Universities included in the study offers courses or parts of courses in:

- Second level Micro- and Macroeconomics
- International Economics
- Econometrics

With regard to first level Economics courses, the Universities of Pretoria, Johannesburg, Free State, North West: Potchefstroom, Vaal Triangle and Mafikeng campuses and Western Cape offers a general or introductory Economics course together with first level Micro- and Macroeconomics. The University of Kwazulu Natal only offers Macroeconomics on the first level together with one semester in introductory Economics. The University of South Africa offers two semesters of Introductory Economics. The Universities of Cape Town, the Witwatersrand, Stellenbosch and Venda offer only first level Micro- and Macroeconomics but all offers Economics for non-specialists for students not familiar with the subject.

Only the Universities of Cape Town, the Witwatersrand, Stellenbosch, Rhodes and the Western Cape offers third level Microeconomics and all of the above plus the University of Kwazulu Natal and Nelson Mandela Metropolitan University offers third level Macroeconomics.

Thirteen of the fourteen universities included in this study offer a course or part of a course in Public Sector Economics, thus all except the University of the Witwatersrand that offers a course in Policy analysis that falls under Economic Policy.

Eleven of the fourteen Economics departments included in this study offer a course or part of a course in Development Economics.

Ten of the fourteen departments included in this study offer a course or part of a course in Labour Economics.

Nine of the fourteen departments included in this study offer a course or part of a course in Economic History.

Seven of the fourteen departments offer full semester courses in Finance / Financial Economics. These include the Universities of Pretoria, Kwazulu Natal, South Africa, Free State, Western Cape, Venda and the North West University, Potchefstroom and Vaal Triangle campuses.

Six Economics departments offer a course in Environmental Economics.

Also, six offer Monetary Economics. These include Pretoria, South Africa, Rhodes, Free State, Venda and the North West University, Potchefstroom and Vaal Triangle campuses.

The University of Cape Town is the only university included in this study that dedicates a full semester course to the topic of Cooperation and Competition. It is also one of five universities that offer two or more semesters in International Economics. One of these semesters differs from other Economics department's International Economics courses by focussing on International Trade Bargaining.

The Economics department of the University of the Witwatersrand is the only department that offers three semester courses in Economic History. These courses include the United States' Economic History, African Economic History and South African Economic History.

The Economics department of the Witwatersrand is also one of two departments that offer two semester courses in Development Economics. One of these semester courses focus of the topic of the Economics of Education.

The department is also the only one offering a course in Welfare State Economics. The department is one of three offering a course in Economic Policy named Policy Analysis.

The Economics department of the University of Witwatersrand is also one of three departments that offer courses in Econometrics, Mathematics for Economists and Economic Statistics and the only department offering Mathematics for Economist as part of three semesters and Economic Statistics as part of two semesters.

To summarise: the Economics department of the University of the Witwatersrand differentiates itself from other Economics departments included in this study in the fields of in Economic History, Economic Development, Policy analysis and Quantitative Economics.

The Economics department of the University of Stellenbosch differentiates itself from the other departments included in this study in the fields of Management Economics, Economic policy and Current Economic Questions.

It is the only department offering a separate course in Current Economic Questions (except for the University of Kwazulu Natal that provides for a course called Special Topics). It is also one of three departments offering a course in Economic policy and the only department that specifically includes Management Economics as one of the key topics in a course.

The University of Pretoria's Economics department offers a good mix of all the subjects generally presented by at least five other Economics departments. Except for the course called Economic Analysis that is only offered by two departments. The course includes topics such as economic growth, Inflation, Employment, Unemployment, Income distribution and Econometric skills. The department is also one of three that presents two semesters in Introductory Economics, one in first level Microeconomics and one in first level Macroeconomics.

The Economics department of the University of Kwazulu Natal differentiates itself from other departments in this study by offering four semesters in Finance, being one of two departments offering Industrial Economics, and being one of three departments offering courses in Econometrics, Mathematics for Economists and Economic Statistics.

It is also one of five Economics departments offering two or more semesters in International Economics. One of these semesters differs from other Economics department's International Economics courses by focussing on Maritime Transport economics.

The University of South Africa's Economics department is the only department offering a course in the Economics of tourism. It is also the only department offering three

semesters of International Economics. It is one of three departments courses in Economic indicators and Economic Policy and one of four departments offering two semesters in Economic History.

The Economics department of the University of Johannesburg differentiates itself from the rest firstly in Quantitative Economics. It offers four semesters in Econometrics and one semester each in Mathematics for Economists and Economic Statistics. Furthermore the department is the only one dedicating one full semester to Economic growth theories (except for the University of Cape Town that focus on this topic in it's third level Macroeconomics course). It is also one of two departments that offer two semester courses in Development Economics; it's one of four that offer two semesters of Economic History and one of five that offer two or more semesters in International Economics. Thus the field in which this department differentiates itself is Quantitative Economics, Economic growth theories, Development Economics, Economic History and International Economics.

Rhodes University's Economics department offers a good mix of all the subjects generally presented by at least five other Economics departments. Except for the course called Economic Analysis that is only offered by two departments.

The University of the Free State's Economics department is one of two offering a course in Bank Risk Management and offers one and a half courses of Development Economics (the third most of those departments included in the study).

The University of the North West has three Economics departments – one on the Potchefstroom campus, one on the Vaal Triangle campus and one on the Mafikeng campus. The Potchefstroom and Vaal Triangle campuses offer the same courses. In this study it was counted as one department. The fields in which these two departments differentiate itself, is Bank Risk Management and International Economics. The department are also one of two departments offering Economic Analysis. This course incorporates the analysis of Economic indicators, Econometric skills and integrated assessment.

The Mafikeng campus' Economics department differentiates itself from the rest of the departments included in the study, in the field of Economic Planning (three semester courses).

The Nelson Mandela Metropolitan University's Economics department is the only department offering a full semester course in Comparative Economics and is one of four universities offering two semesters in Economic History. Furthermore, the Nelson Mandela Metropolitan University offers a good mix of all the subjects generally presented by at least five other Economics departments.

The fields in which the Economics department of the University of the Western Cape is differentiating itself in, is Labour Economics and Public Sector Economics. It is the only department offering these courses in two semesters.

The Economics department of the University of Venda differentiates itself from the rest of the departments included in this study by being the only department offering a course called Economies of Africa. It is also one of two departments offering Industrial Economics and one of three, offering a course in South Africa's Economic Indicators. It's also one of five departments offering Econometrics and Mathematics for Economists.

It is important to note that some of the courses are electives and this is not indicated as such yet.

## **7. CONCLUSION**

Worldwide numerous studies have been performed on the teaching and research of Economics Departments. A framework of the goals of a typical Economics Department is summarised in Diagram 1. In South Africa little research has been done on what the content of courses offered by Economics Departments at South African Universities is. This is important information for Heads of Departments to assess student applications from other universities, as Economic departments at Universities in South Africa generally have very little knowledge of what is happening at other institutions. The information is also important for faculty to review the content of the courses they present. Prospective students can also benefit having this information to make informed decisions about what university they would like to attend.

At this stage open source information have been gathered and tabularized. It is important to note that this is a work-in-progress paper and the information provided in it may not be completely accurate. The goal of the paper is to provide heads of Departments and faculty with the information gathered up to this point in the study so that they can make recommendations for further applications of this study as well as possible amendments to the data.

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