ATTACHMENT 2 (e)

Course Specifications

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

Course Specifications
(CS)

Applied quantitative analysis APEC216

Dr. Kamaleldin Ali Bashir Ibrahim
Instructor

Course Specifications

Institution	Date of Report
King Saud University	29/1/2014
College/Department: Food and agricultural sciences/ Agricultural economics	

A. Course Identification and General Information

1. Course title and code:
Applied quantitative analysis APEC216

2. Credit hours 3 Credits

3. Program(s) in which the course is offered.
(If general elective available in many programs indicate this rather than list programs)
Applied economics

4. Name of faculty member responsible for the course
Kamaleldin Ali Ibrahim

5. Level/year at which this course is offered 3rd level/2nd year

6. Pre-requisites for this course (if any)
Math150 & APEC205

7. Co-requisites for this course (if any)
N/A

8. Location if not on main campus
N/A

9. Mode of Instruction (mark all that apply)

a. Traditional classroom	√	What percentage?	70
b. Blended (traditional and online)		What percentage?	
c. e-learning	√	What percentage?	30
d. Correspondence		What percentage?	
f. Other		What percentage?	

Comments:
The course has a lecture and a lab component. In the lab component students get hands-on experience in applying concepts discussed in the lectures. They generally download some data sets to use in their weekly exercises.

B Objectives

1. What is the main purpose for this course? Introduce students to applying economic models, particularly linear regression and programming models, and dynamic and equilibrium analysis.
2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field) Increased use of specialized software such as Eviews and SPSS rather than excel.

C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
Introduction: research methods	1	4
Quantitative vs qualitative methods	1	4
Quantitative & qualitative methods: pros and cons	1.5	6
Basis of Quantitative methods	1.5	6
Taxonomy of Quantitative methods	1	4
Sampling methods	2	8
Simple Quantitative methods: descriptive stats for raw and tabulated data	2	8
Mathematical programming methods: linear programming	2	8
Econometric methods	3	12
Total	15	60 hours

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30	30	N/A	N/A	N/A	60
Credit	2	1	N/A	N/A	N/A	3

3. Additional private study/learning hours expected for students per week.	2

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The ***National Qualification Framework*** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. **Fourth**, if any program learning outcomes are included in the course learning outcomes, place the @ symbol next to it.

Every course is not required to include learning outcomes from each domain.

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	Describe quantitative (econometric and programming) modeling techniques@.	- Lectures - tutorials	- In class written intraterm tests (2-3) spaced at monthly intervals. - Weekly homework assignments.
1.2			
2.0	**Cognitive Skills**		
2.1	Apply descriptive statistics and regression techniques to analyze economic data.		- In class written intraterm tests (2-3) spaced at monthly intervals. - Weekly homework assignments. - In class presentations.
2.2			
3.0	**Interpersonal Skills & Responsibility**		
3.1			
3.2			
4.0	**Communication, Information Technology, Numerical**		
4.1	Estimate certain economic relationships using statistical software@.		- Weekly homework assignments.
4.2			
5.0	**Psychomotor** NA		
5.1			
5.2			

Suggested Guidelines for Learning Outcome Verb, Assessment, and Teaching

NQF Learning Domains	Suggested Verbs
Knowledge	list, name, record, define, label, outline, state, describe, recall, memorize, reproduce, recognize, record, tell, write
Cognitive Skills	estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise
Interpersonal Skills & Responsibility	demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write

Communication, Information Technology, Numerical	demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize
Psychomotor	demonstrate, show, illustrate, perform, dramatize, employ, manipulate, operate, prepare, produce, draw, diagram, examine, construct, assemble, experiment, and reconstruct

Suggested ***verbs not to use*** when writing measurable and assessable learning outcomes are as follows:

Consider Maximize Continue Review Ensure Enlarge Understand
Maintain Reflect Examine Strengthen Explore Encourage Deepen

Some of these verbs can be used if tied to specific actions or quantification.

Suggested assessment methods and teaching strategies are:

According to research and best practices, multiple and continuous assessment methods are required to verify student learning. Current trends incorporate a wide range of rubric assessment tools; including web-based student performance systems that apply rubrics, benchmarks, KPIs, and analysis. Rubrics are especially helpful for qualitative evaluation. Differentiated assessment strategies include: exams, portfolios, long and short essays, log books, analytical reports, individual and group presentations, posters, journals, case studies, lab manuals, video analysis, group reports, lab reports, debates, speeches, learning logs, peer evaluations, self-evaluations, videos, graphs, dramatic performances, tables, demonstrations, graphic organizers, discussion forums, interviews, learning contracts, antidotal notes, artwork, KWL charts, and concept mapping.

Differentiated teaching strategies should be selected to align with the curriculum taught, the needs of students, and the intended learning outcomes. Teaching methods include: lecture, debate, small group work, whole group and small group discussion, research activities, lab demonstrations, projects, debates, role playing, case studies, guest speakers, memorization, humor, individual presentation, brainstorming, and a wide variety of hands-on student learning activities.

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	In class written intraterm tests (4)	5th & 10th	40%
2	Weekly homework assignments.	weekly	10%
3	Presentations	2-3 times per semester for each student depending on class size	5%
4	participation	Throughout semester	5%
5	Final exam	15th	40%
		Total	100%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week) Faculty and TA's are required, by the college quality management unit, to post their class schedules at the beginning of each term; as part of the schedule they should post and honor office hours and students are encouraged to visit with instructors during these hours; additionally students can make appointments in case they cannot make the office hours. Teaching staff are expected to provide around 4-6 hours weekly for students consultations. Office # 2A57 Email address: kbashir@ksu.edu.sa Phone: +966114678384 Office hours: mon./wed: 12-1 Tue: 10-12 Thur. 12-2

E. Learning Resources

1. List Required Textbooks Abdul Mahmood, Abdul Rahman. Introduction to econometrics, King Saud University, 1415H.
2. List Essential References Materials (Journals, Reports, etc.) N/A
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc) Damodar, Gujarati. Essentials of Econometrics, Mc Graw-Hill1999.
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.) N/A
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software. MS Excel PASW (SPSS)

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) Smart class room (20 seats). A computer lab (20 seats) equipped with PC's featuring Office and statistical packages such as PASW (SPSS) and Eviews. One of the computer labs in the department is devoted to classes that require computational facilities. Faculty members who teach such classes are required to schedule their classes (particularly the practical component) in this lab rather than smart classrooms.

2. Computing resources (AV, data show, Smart Board, software, etc.) Smart board MS Excel and PASW (SPSS)
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) N/A

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching Currently students' end-of-semester survey is by far the main source of feedback. The instructor also uses students' performance on exams, homework assignments, enquiries and questions as a source of feedback on teaching effectiveness. Intermittently, a simple itemized survey soliciting students' feedback on instructors' performance have been employed—usually two to three weeks into the semester.
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor Currently no such strategies are in place; however, the teaching committee at the department level is contemplating the introduction of peer reviews as a strategy of evaluating and improving teaching in the department.
3 Processes for Improvement of Teaching A number of workshops are continuously organized by the "skills development deanship" at the university level—usually at the beginning of each term. These workshops target teaching effectiveness and address and introduce various teaching strategies. Workshops are well announced and teaching staff are encouraged to attend. Improvement in taught material contributes to improvement in teaching, as such attempts are continuously made to supplement the subject matter with recent developments, and always bringing in class the latest events, news (of the day) and tie it in with the respective topic. Students are likewise encouraged to bring such events to class through a reward system. The peer reviews referred to in (2) above could also contribute to improved teaching.
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) Currently there is no such process in place.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. The instructor tries to continuously update the material taught through the web resources, particulary by consulting material from similar courses taught in other institutions.

Faculty or Teaching Staff: __ Kamaleldin Ali Ibrahim

Signature: _____ **Date Report Completed: __19/2/2014**

Received by: _____ **Dean/Department Head**

Signature: _____ **Date: _____**