

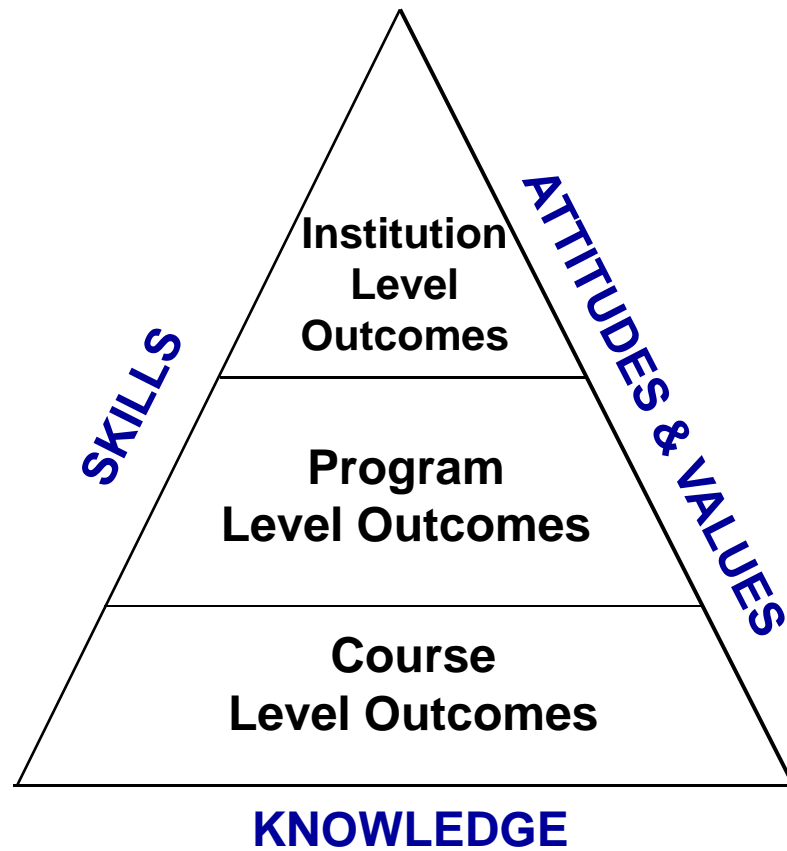
# **General Education Requirements at KFUPM**

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# INTRODUCTION



**The KSA Triangle**

# INTRODUCTION

This presentation is based on the outcome of the work of a Task Force that was charged with:

- Reviewing the University requirements for IAS, ENGL, PE, MATH and Science,
- Recommending a University policy for the General Education Requirements (GER).

# COMPONENTS OF THE GE

## Purpose of the GE

The objective of General Education component of the curriculum is to:

- Complement the depth and focus of the major programs.
- Provide students with the breadth of knowledge and skills that enables them to:
  - Understand the real world problems,
  - Communicate effectively,
  - Think critically,
  - Act professionally and ethically.
  - Function effectively in the society
  - Develop personally,
  - Work in multidisciplinary teams, and
  - Appreciate global issues,

# COMPONENTS OF THE GE

Typical coverage of the GE courses include the fundamentals of literacy, skills, attitudes, and values listed below:

- **Math and Sciences**
  - Mathematical Sciences
  - Quantitative Reasoning
  - Natural Sciences
  - Science, Technology and Society
- **Critical thinking**
- **Computer Literacy**

# COMPONENTS OF THE GE

- **Communication Skills (Arabic and English)**
  - Written Communication
  - Oral Communication
  - Visual & Electronic Communication
- **Religion and Humanities**
  - Islamic Studies
  - Ethics
- **Social Sciences**
  - Human behavior
  - Social, cultural, and political processes

# COMPONENTS OF THE GE

- **Attitudes and skills for well-being**
  - Physical Education
- Additional requirements could be provided by the concerned college/departments as needed.
- The outcomes of these components can be achieved through individual courses or through more than one course over the curriculum.

The educational objectives and learning outcomes of each GE component should be detailed and made available to all.

# Accreditation requirements

- New accreditation criteria are outcome-based.
- The emphasis is shifting more from quantitative to qualitative approach.
- Skills, values and attitudes are becoming essential components of the accreditation requirements.

## Analysis of the Current GER at KFUPM

Analysis of the current GER at KFUPM shows variations in the requirements as well as the understanding of the components of GE from one department to another.

## Analysis of the Current GER at KFUPM

- No common well-defined understanding on the contents or the courses that should be considered as general education requirement.
- Almost anything that is not included in the core requirement but is required for graduation has been listed under general education. (in some departments)

# MAPPING OF GER IN THE CURRICULUM

The mapping of existing GE courses to the identified GE outcome categories is based on:

- Information contained in the current undergraduate bulletin

# MAPPING OF THE GER IN THE CURRICULUM

## NOTES ON THE MAPPING:

1. Only GE courses common to all departments in the University are mapped.
2. Prep year courses are mapped based on the approved revised Prep Year curriculum.
3. Some mapped courses may only partially be achieving the outcomes of the respective category.
4. Some departments require students to take GS xxx courses as part of their GE. However, because these are not indicated as specific GS courses, it is difficult to include them.

# CONCLUSIONS AND RECOMMENDATIONS

## 1. Mathematical Sciences

There is adequate coverage of the GER in mathematical sciences in all disciplines at the university

## 2. Quantitative Reasoning

There is sufficient coverage of the GER in quantitative reasoning in all disciplines at the university

# CONCLUSIONS AND RECOMMENDATIONS

## 3. Natural Sciences

There is reasonable coverage of the GE in natural sciences in all disciplines at the university except in the College of Industrial Management where there is no single course required in this area.

## 4. Science, Technology and Society

There is insufficient coverage in the GE in addressing the issue of science, technology and society in all disciplines at the university.

# CONCLUSIONS AND RECOMMENDATIONS

## 5. Critical thinking

There is a general feeling that, despite the emphasis on critical thinking in many subject areas, there is a deficiency in these skills.

## 6. Computer Literacy

Computer skills are not introduced to KFUPM students early enough in their university education.

# CONCLUSIONS AND RECOMMENDATIONS

## 7. Written Communication

The existing English courses will satisfy the written communication requirements if properly revised and integrated throughout starting from the prep year.

## 8. Oral Communication

There is considerable deficiency in oral communication skills at all levels.

## 9. Visual and Electronic Communication

Visual and electronic communication skills are not introduced to KFUPM students early enough in their university education.

# CONCLUSIONS AND RECOMMENDATIONS

## 10. Islamic Studies

There is reasonable coverage of Islamic studies category in the GE

### *Recommendation:*

Existing Islamic courses should be revised to address the intended outcomes.

## 11. Ethics

There is insufficient emphasis on professional and academic ethics.

### *Recommendation:*

The present ethics course should be revised to emphasize professional and academic ethics. Furthermore, ethical values should be emphasized and practiced in individual programs.

# Religion and Humanities

## Islamic Studies

### **Islamic Studies**

In higher education, the role of Islamic studies in molding students' moral, ethical, and social values can not be overemphasized.

#### **Objective:**

- Enrich students' knowledge and appreciation of Islamic perspective on contemporary issues.

# Religion and Humanities

## Islamic Studies

### **Outcomes:**

Students should have the ability to:

- Obtain a comprehensive outlook of the principles of Islam and their relevance to issues of contemporary thought.
- Further develop an intellectual and cultural understanding and appreciation of Islamic faith and values.

# Religion and Humanities

## Islamic Studies

### **Outcomes:**

- Think and critically assess various Islamic literatures.
- Demonstrate an understanding of other civilizations, cultures and ways of life.
- Critically assess relevant questions about the contemporary issues of the modern world.

# Religion and Humanities

## Islamic Studies

### **Ethics**

In an ever changing world ethical values tend to take on a less important role. Therefore, it is important for students to develop appreciation for moral, religious and social values which constitute the main building blocks of a responsible citizen.

### **Objective:**

- Develop an awareness of ethical values as they relate to social, academic and professional life.

# Religion and Humanities

## Islamic Studies

### **Outcomes:**

Students should have the ability to:

- Demonstrate an understanding and appreciation of ethical values in Islam.
- Evaluate contemporary social and professional issues from an ethical perspective.
- Apply ethical behavior in all aspects of life.

# CONCLUSIONS AND RECOMMENDATIONS

## 12. Human behavior

There is inadequate coverage of the human behavior category in the GE.

### *Recommendation:*

A course in human behavior should be made as part of the GE.

# Social Sciences

## Human Behavior

### Human Behavior

All graduates will eventually be working in group settings and/or taking up leadership positions in government and industry.

Therefore, it is important that they understand the principles of individual and collective human behavior.

### Objective

- To develop students' understanding of the diverse personal, interpersonal, and societal forces that shape human behavior and human interaction.

# Social Sciences

## Human Behavior

### Outcomes

- Use a variety of theoretical perspectives to explain human behavior
- Develop a sense of responsibility for oneself and one's role in society
- Analyze and assess basic social problems and issues, their various causes, implications, and possible solutions

## CONCLUSIONS AND RECOMMENDATIONS

### 13. Social, cultural, and political processes

There is insufficient coverage of the social, cultural, and political processes category in the GE.

#### *Recommendation:*

Existing courses dealing with social, cultural, and political processes should be revised to address the intended outcomes of this category.

# Social, cultural, and political processes

## **Social, cultural, and political processes**

It is important for students to have a comprehensive understanding of the social, political, and cultural aspects of the global environment.

### **Objective:**

- Develop an understanding of the social, political, and cultural processes as they impact on individual and society.

# Social, cultural, and political processes

## **Outcomes:**

Students should be able to:

- Develop an understanding of how factors, such as religion, gender, and social status, shape individual lives and social institutions.
- Understand the cultures of other societies.
- Recognize the context of cultural, personal, social, and political situations and developments.

# CONCLUSIONS AND RECOMMENDATIONS

## 14. Attitudes and skills for healthy life

There is sufficient coverage of physical education in the GE. However, there is insufficient stress on the knowledge required for well-being.

# General Recommendations

- Each course in the GE must have clearly defined measurable objectives and learning outcomes that are understandable by both the instructors and the students
- All courses addressing the categories of the GE should be revised according to the required learning outcomes.
- Course assessment including exams should be designed to reflect achievement of the intended outcomes of each course.

# General Recommendations

- All faculty, but especially those in the departments which offer most of the GE courses, should be trained on the outcome-based approach in education.
- An academic advising system should be developed to ensure effective selection of elective courses that meet GE requirements.
- The GE categories should be clearly reflected in the undergraduate bulletin for all programs to ensure uniformity of the interpretation of what constitute GE.

# Members of the Task Force

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THANK YOU