

Akkreditierungsagentur  
im Bereich Gesundheit und Soziales  
Accreditation Agency in Health and Social Science



## **Assessment Report**

**for the Application of  
King Abdul-Aziz University, Jeddah, Saudi Arabia,  
Faculty of Applied Medical Sciences,  
Clinical Nutrition Department,  
for the Accreditation of the Bachelor Study Program  
“Clinical Nutrition”  
(Bachelor of Science in Clinical Nutrition)**

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Decision	18.02.2016

## Table of contents

<b>1</b>	<b>Introduction into the accreditation procedure</b> .....	<b>4</b>
<b>2</b>	<b>Overview</b> .....	<b>7</b>
<b>2.1</b>	<b>Procedure-related documents</b> .....	<b>7</b>
<b>2.2</b>	<b>Study program</b> .....	<b>8</b>
2.2.1	Structural data of the study program .....	8
2.2.2	Qualification objectives and employment opportunities.....	10
2.2.3	Modularization and exam system .....	12
2.2.4	Admission requirements.....	19
<b>2.3</b>	<b>Study conditions and quality assurance</b> .....	<b>21</b>
2.3.1	Human resources .....	21
2.3.2	Facilities .....	22
2.3.3	Quality assurance.....	24
<b>2.4</b>	<b>Institutional context</b> .....	<b>27</b>
<b>3</b>	<b>Expert report</b> .....	<b>28</b>
<b>3.1</b>	<b>Preliminary remarks</b> .....	<b>28</b>
<b>3.2</b>	<b>Basic information about the study program</b> .....	<b>31</b>
<b>3.3</b>	<b>Expert report</b> .....	<b>32</b>
3.3.0	Introduction and comprehensive remarks .....	33
3.3.1	Program Aims and learning outcomes .....	34
3.3.2	Curriculum design .....	36
3.3.3	Staff.....	38
3.3.4	Facilities and learning resources .....	40
3.3.5	Study process and student assessment.....	41
3.3.6	Program management.....	45
<b>3.4</b>	<b>Summary</b> .....	<b>47</b>
<b>4</b>	<b>Decision of the accreditation commission</b> .....	<b>51</b>

## 1 Introduction into the accreditation procedure

King Abdul-Aziz University, Jeddah, Kingdom of Saudi Arabia has assigned the Accreditation Agency in Health and Social Science (hereinafter, the AHPGS) to implement the accreditation procedure of study programs.

The AHPGS is an interdisciplinary and multi-professional organization. Its mission is to evaluate and accredit bachelor and master programs in the fields of health and social sciences as well as in related domains.

Since 2004, the AHPGS is a member of the European Consortium for Accreditation (ECA). In 2006, the AHPGS joined the European Association for Quality Assurance in Higher Education (ENQA); in 2009, it became a full member of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE). Since 2012, the AHPGS is a member of the Network of Central and Eastern European Quality Assurance Agencies in Higher Education (CEENQA). Starting from 2009, the AHPGS is listed in the European Quality Assurance Register (EQAR). The AHPGS is accredited by the German Accreditation Council (currently until 2019).

The accreditation criteria of the AHPGS are the basis for the accreditation decision. These criteria can be found on the webpage of the AHPGS<sup>1</sup>. The Accreditation Criteria are developed by the AHPGS in close accordance with the existing criteria and requirements valid in the Federal Republic of Germany and based on the “Standards and Guidelines for Quality Assurance in the European Higher Education Area” (ESG), established by the European Association for Quality Assurance in Higher Education (ENQA).

The decision regarding the accreditation of each study program of King Abdul-Aziz University is carried out by the Accreditation Commission of the AHPGS based on the following accreditation criteria:

1. Program aims and learning outcomes
2. Curriculum design
3. Personnel
4. Facilities and learning resources
5. Study process and student assessment
6. Program and quality management

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<sup>1</sup> Visit the website of the AHPGS: <http://ahpgs.de/english/program-accreditation/>

The accreditation procedure is carried out in four steps:

### **I. The University's application**

The AHPGS verifies the sufficiency of the documents submitted by the University, namely the self-evaluation report and its corresponding annexes. These are to fulfill the assessment spheres as well as the AHPGS standards. As a result, the AHPGS produces a summary (see below), which is to be approved by the University and subsequently made available to the expert group together with all other documentation.

### **II. Written review regarding the content of the program**

Parallel to the first step, the main documents are reviewed by the expert group assigned by the accreditation commission of AHPGS. This is done in order to verify the compliance of the study program with the applicable accreditation criteria. Consequently, the experts comprise a short summary regarding the study program.

### **III. On-site visit (peer-review)**

The experts carry out an on-site visit at the University. In the course of the visit, they hold discussions with various members of the University, including the University and the department administration, the program management, teachers and students. These discussions provide the experts with details about the study program beyond the written documents. The task of the expert group in the on-site visit is to verify and evaluate the objectives of the program and its projected study results, its structure, staff, material resources, course of studies and methods of assessment (selection of students, assessment of achievements, students' support), as well as of the program management (program administration, external assurance of study quality).

Following the on-site visit, the expert group issues an expert report for each study program. The expert report is based on the results of the visit, the written review of the study program and the documents submitted by the University. The expert reports are made available to the University for it to issue a response opinion.

The expert report, as well as the University's response opinion – together with the submitted documents – is submitted to the accreditation commission of the AHPGS for the final decision, which is formulated in three ways: accreditation, accreditation with conditions or denial of accreditation.

#### **IV. The AHPGS decision regarding the accreditation**

The accreditation commission of the AHPGS examines the documentation made available, namely the University's application, its annexes, the summary of the program, the expert report as well as the University's response opinion. These documents represent the basis for the decision regarding the accreditation of the study program by the Accreditation Commission of the AHPGS.

## 2 Overview

### 2.1 Procedure-related documents

The contract between the King Abdul-Aziz University, Jeddah, Saudi Arabia, (hereinafter “the University”) and the AHPGS was signed on 3 September 2014. The University submitted the program’s Self-Evaluation Report and other relevant documents to the AHPGS in electronic format on 25 September 2014. The AHPGS forwarded open questions and explanatory notes (hereinafter OQ) pertaining to the Self-Evaluation Report and its annexes to the University on 16 February 2015. On 11 March 2015, the University submitted the answers to the open questions and explanatory notes (hereinafter AOQ) to the AHPGS.

This document presents the summary and the assessment of the bachelor study program “Clinical Nutrition”.

The application documentation submitted by the University follows the outline recommended by the AHPGS. Together with the Self-Evaluation Report, the University provided the following documents specific for the program:

Annex	Description
1	Program description
2	Course description
3	Modular structure of the program “Clinical Nutrition”
4	Course overview
5	Study plan
6	Information about the workload of the teaching staff
7	CV of the teaching staff
8	Clinical Nutrition Department description
9	Teaching strategies and methods
10	Enrollment data
11	Key performance indicators (KPI)
12	Cooperation agreement with the University Hospital

Table 1. Documents specific for the program “Clinical Nutrition”

Alongside the program-specific documents, the following documents pertain to all study programs submitted by the University for accreditation:

Annex	Description
A	King Abdul-Aziz University student charter of rights and duties
B	Mechanisms of students’ admission in faculties and departments after the preparation year
C	King Abdul-Aziz University regulations for examinations and transfer from one university to another
D	Teaching staff appointment regulations

E	Declaration about equipment provision
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Table 2. Documents common for all study programs submitted for accreditation

The Self-Evaluation Report, the open questions (OQ) and the answer to the open questions (AOQ) as well as the additional documents build the basis for the present summary. The layout bears no significance, as it solely reflects the standards agreed within the University.

## 2.2 Study program

### 2.2.1 Structural data of the study program

University	King Abdul-Aziz University
Faculty/Department	Faculty of Applied Medical Sciences Clinical Nutrition Department
Title of the study program	“Clinical Nutrition”
Degree awarded	Bachelor of Science in Clinical Nutrition
Language of instruction	English
Form of studies	Full-time
Organizational structure	Sunday – Thursday
Period of education	4 years (8 semesters) + 1 year (12 months) of internship
Workload of the program according to the University system of ‘study units’	137 study units
Study units <sup>2</sup> /workload hours	1 study unit = 1 lecture hour 1 study unit = 2 practical class hours 1 study unit = 2 clinical practice hours 0 study unit = 1 tutorial hour
study units for the final paper/ final research project	2 study units
Beginning of the study program	Academic year 2005-2006
Time of admission	Annually from June to August
Male/female students	Female
Number of available places on the program	30 (there are only female students in the program)

<sup>2</sup> The number of study units is determined by the amount of contact hours per week.



Number of students admitted to the program in the academic year 2013/2014	40 (students, who have completed the preparatory year and are admitted to the 2 <sup>nd</sup> year of the program)
Number of graduates in the academic year 2013/2014	24
Particular enrollment conditions	For the preparatory year: - General secondary school certificate or equivalent - General Aptitude Test (“Qudrat”) - General Achievement Test (“Tahseely”) For the department: - Completion of the preparatory year - Medical investigation - Interview by the department admission committee
Tuition fees	No fees for students; all expenses are covered by the Ministry of Higher Education.

Table 3. Structural data of the program “Clinical Nutrition”

As other study programs offered at King Abdul-Aziz University, the program “Clinical Nutrition” consists of three types of courses:

- University requirement courses; they are obligatory for all students enrolled at the University and are taught mainly in the second and third years of study in the program.
- Faculty requirement courses; they are obligatory for students of a certain faculty and specialization and are usually offered in the first preparatory year and also at the beginning of the second year of studies.

These two types are offered by or in association with other programs, departments, and faculties of the University.

- Department requirement courses; they are specific for the program and are taught by the Department of Clinical Nutrition.

All students enrolled at the University have to complete the first year of studies, which is also called *the preparatory year*. The preparatory year takes place in the premises of the Faculty of Science and then for three years students are engaged at the Faculty of Applied Medical Sciences. This initial period prepares students for further specialization in the chosen sphere of health care services. According to the University, the preparatory year entails two tracks or directions with equal share of the study load: scientific and humanistic. Students planning to pursue

their studies in the Faculty of Applied Medical Sciences, have to register for the scientific track (AOQ 7).

Clinical practice is introduced into the curriculum in the 4<sup>th</sup> year and is conducted at King Abdul-Aziz University Hospital. Upon completion of all academic courses and acquisition of 137 study units, students can start the obligatory clinical internship year. The final internship in the fifth year can be implemented at the University Hospital and, partially or fully, at other health care institutions, such as King Fahd Armed Forces Hospital, King Fahd Hospital, Saudi German Hospital in Jeddah<sup>3</sup>, or Aramco Hospital in Dhahran (the Self-Evaluation Report, 1.2.4). If students want to do their internship at a health care center other than the University Hospital, they have to submit a signed application together with the conformation of the hosting institute as well as a list of complementary documents (for details, see AOQ 25).

Students graduate from the program and receive the title 'Bachelor of Science in Clinical Nutrition' after they have obtained all obligatory 137 study units, completed all courses with the minimum grade "D" (60% of performance) or better and successfully accomplished the internship year (Self-Evaluation Report 1.1.6).

### **2.2.2 Qualification objectives and employment opportunities**

The main objective of the program "Clinical Nutrition" is to prepare highly qualified specialists capable of serving the country in the sphere of clinical nutrition including clinical dietetics, community nutrition and food service management. According to the University, the program objective is in congruence with the Faculty and the University mission to meet the needs of the Saudi community by providing specialized dieticians (Annex 1, page 4).

By the end of their studies, graduates are able to apply anthropometric, biochemical, clinical and dietary assessment techniques of a human body, design and implement a diet therapy, measure children, adolescent and adults for obesity. Furthermore, graduates are expected to be able to meet the nutritional needs changing with different states of body (pregnancy, athletic performance, different age groups) and explain pathophysiological changes that accompany diverse health conditions. Students have to be able to recognize and deal with frequent nutrition problems of various groups vulnerable to specific health problems. In terms of data analyses, students learn to design clearly structured questionnaires

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<sup>3</sup> Visit the website: <http://jed.sghgroup.com.sa/> (24.03.2015)

for patients, to collect and then effectively apply the received answers for the management of patients' nutrition (for the detailed description of the competences, see the Self-Evaluation Report 1.3.3).

With regard to research-related skills, students learn to conduct a survey and analyze scientific material related to experimental nutrition, clinical study, which could be independent or in conjunction with a larger ongoing research study, and to nutrition and dietetic services or community-based practice. Through the mandatory research project at the end of their studies, students demonstrate and at the same time solidify their abilities to apply knowledge of basic sciences, mathematics, computational methods and clinical nutrition principles, to design, evaluate and find optimal solutions to clinical nutrition problems. In addition to this, the program envisages development of communication skills in oral and written English, team-work abilities, and improvement of computational and statistical skills, which are necessary when interpreting the collected data into meaningful conclusions and recommendations (see Annex 1, page 11).

As the University states, graduates of the program can find employment in the sphere of education, sports medicine, media, private sectors and private clinics as well as research centers. They can work in nutrition management services and non-governmental organizations, such as UNESCO and the United Nations (Self-Evaluation Report, 1.4.1). Furthermore, graduates of the program can continue postgraduate studies abroad; the University offers scholarships for that purpose.

To the information on the current situation in the labor market, the University emphasizes that the number of Saudi dietitians is limited and does not fulfil the needs of the local society. According to the statistics from Saudi Ministry of Health, in the year 2013 there were 1,545 dietitians for the total of 28,830,000 inhabitants, which means that there is one dietitian per over 18,000 people (AOQ 35). Due to the continuous growth of the population, the existing demand for medical care professionals is expected to increase respectively in the coming years (Self-Evaluation Report, 1.4.2).

The Faculty of Applied Medical Sciences has initiated the concept of the Alumni Unit, whose function is to maintain contact with its graduate students and to continuously update the information on their professional development. Thus, the Alumni Unit conducts an annual survey where students are requested to inform about their current position (working, studying or neither), and provide further relevant details (see the Alumni Survey in AOQ, Annex 1).

According to the results obtained from the graduates of the years 2008 - 2011, approximately 34% of graduates continued their studies abroad to obtain master's and PhD degree, around 63% are employed in health care institutions within the country and 3% are currently not engaged in either work or studies due to the lack of employment positions and long working hours (AOQ 17).

### 2.2.3 Modularization and exam system

The regulated study period in the bachelor's degree program "Clinical Nutrition" is 4 years (8 semesters) followed by 1 year of clinical practice (intern-ship program). One semester lasts for 15 weeks followed by 3 weeks for examinations; the first semester of an academic year includes the period from September to January and the second semester includes the period from February to June. In total, the program consists of 47 courses, of which 28 (60%) are program specific, 9 (19%) are faculty requirement courses taught to all students of the faculty, and 10 (21%) are university requirement courses taught to all students at the University at the preparatory year (Annex 8). The number of courses per semester varies from 5 to 7.

By the end of their studies, students have to acquire 137 study units, of which 86 for the program requirement courses, 26 are awarded for university requirement courses and 25 for faculty requirement courses, and (see Annex 8, page 8).

The first year of studies (the preparatory year) comprises introductory courses in Biology, Physics, and Chemistry. The objective of the preparatory year is to solidify and broaden students' knowledge of English language, as well as to provide them with additional skills in computer science, statistics, and communication. As seen from Annex 3, the preparatory year consists of the university and faculty requirement courses, which are assembled according to the requirements of further specialization. The preparatory year courses are offered by the Faculties of Science, Medicine and Pharmacy.

Preparatory year					
Sem.	Course title	Th.	Pr.	Tr.	Cr.
1	General Mathematics	3	-	-	3
	General Physics	2	1	-	3
	English Language (1)	3	-	-	3
	Introduction to Computers	-	3	-	3
<b>Total:</b>		<b>8</b>	<b>4</b>	<b>0</b>	<b>12</b>
2	General Statistics	2	1	-	3
	General Chemistry	2	1	-	3

	English language (2)	3	-	-	3
	General Biology	2	1	-	3
	Communication Skills	2	1	-	3
<b>Total:</b>		<b>11</b>	<b>4</b>	<b>0</b>	<b>15</b>
Th.- theory; Pr.- practice; Tr.- Training; Cr.- study units					

Table 4: Preparatory year courses (1<sup>st</sup> year of studies)

The following three years of the program focus on specialization courses. At the same time students continue attending the mandatory and selective university and the faculty requirement courses (Annex 5):

Sem.	Course title	Th.	Pr.	Tr.	Cr.
3	Principles of Food Science and Nutrition	3	-	1	3
	Nutrition During Life Cycle	3	1	1	4
	Biochemistry	3	1	1	4
	Physiology	2	-	1	2
	Anatomy	1	1	1	2
	Arabic Language	3	-	1	3
	Islamic Culture	2	-	1	2
<b>Total:</b>		<b>17</b>	<b>3</b>	<b>7</b>	<b>20</b>
4	Nutritional Biochemistry	2	1	1	3
	General Pathology	2	-	1	2
	Nutritional Status Assessment	1	2	1	3
	Food Safety and Hygiene	3	1	1	4
	Health Psychology	2	-	1	2
	Arabic Language	3	-	1	3
	Islamic Culture	2	-	1	2
<b>Total:</b>		<b>15</b>	<b>4</b>	<b>7</b>	<b>19</b>
5	Medical Nutrition Therapy (1)	3	1	1	4
	Food Analysis	2	1	1	3
	Medical Microbiology and Parasitology	3	2	1	5
	Nutrition and Immunology	2	-	1	2
	Nutrient Estimation	2	1	1	3
	Islamic Culture	2	-	1	2
<b>Total:</b>		<b>14</b>	<b>5</b>	<b>6</b>	<b>19</b>
6	Medical Nutrition Therapy (2)	3	1	1	4
	Nutrition and Economy	2	-	1	2
	Community Nutrition	2	1	1	3
	Enteral and Parenteral Nutrition	2	1	1	3
	Vocational Health and Safety	2	-	1	2
	Food and Drugs	2	-	1	2

	Islamic Culture	2	-	1	2
<b>Total:</b>		<b>15</b>	<b>3</b>	<b>7</b>	<b>18</b>
7	Clinical Rotation in Medical Nutrition Therapy (1)	-	6	1	6
	Food Habits and Social Concepts	2	-	1	2
	Professional Skills in Dietetic	2	1	1	3
	Research Methods in Health Sciences	2	1	1	3
	Metabolic and Genetic Nutritional Disorders	2	1	1	3
<b>Total:</b>		<b>8</b>	<b>9</b>	<b>5</b>	<b>17</b>
8	Clinical Rotation in Medical Nutrition Therapy (2)	-	6	1	6
	Nutritional Epidemiology	2	-	1	2
	Management of Nutrition Services and Dietetic	2	1	1	3
	Advanced Topics in Food Science and Nutrition	2	-	1	2
	Nutrition for Health and Fitness	1	1	1	2
	Student Research Project	-	2	1	2
<b>Total:</b>		<b>7</b>	<b>10</b>	<b>6</b>	<b>17</b>
<b>Total study units for the whole program:</b>				<b>137</b>	
Th.- theory; Pr.- practice; Tr.- Training; Cr.- study units					

Table 5: Overview of the main study period of the program “Clinical Nutrition”

Annex 2 contains a detailed description of each course of the program curriculum. This description covers the following aspects: course title, the amount of study units, faculties responsible for the course, pre-requisites to be admitted to the course, objectives, lecture topics timetable, practical topics timetable, course components, knowledge and skills to be acquired, methods of student assessment, and learning resources.

As it was already mentioned, apart from courses designed particularly for the specialty of “Clinical Nutrition”, the program includes also the university requirement courses that are mandatory for all students of the University and the faculty requirement courses that are mandatory for all students of the Faculty of Applied Medical Sciences. Hence, the university requirement courses, such as *Islamic Studies* and *Arabic language* are offered by the Faculty of Arts and Humanities, whereas *Computer Science* is offered by the College of Computing and Information Technology. Among the faculty requirement courses, *Anatomy* and *Biochemistry* are taught in cooperation with the Faculty of Medicine, while the *Food and Drugs* is designed in cooperation with the Faculty of Pharmacy (refer to Annex 3 to see what faculties are responsible for which courses).

There is no cooperation with other national or international universities (Self-Evaluation Report 1.2.2). The University claims that the program “Clinical Nutrition” was adapted to international B.Sc. programs and international standards of

the American Dietetic Association and the European Federation of the Association of Dietitians. Besides, there are specialists from Egypt and Sudan working in the program (Self-Evaluation Report 1.2.8).

The Department ensures to achieve the objectives of both program-specific courses and those studied together with other units of the University by means of discussions of learning objectives and examination measures with other departments during various meetings. Furthermore, the Department of Clinical Nutrition prepares course portfolios and annual academic reports. Students are required to participate in course evaluation surveys at the end of each semester (see the forms of student evaluation surveys in AOQ, Annex 1). All course syllabi are regularly reviewed by the Board of the Department and discussed with course coordinators and students (Annex 1, page 5). As for the teaching staff, the Department implements a recruitment policy with specific requirements to professional rank and experience of teaching.

Efficiency and suitability of the program objectives and learning outcomes are maintained by the fact that the program is regularly evaluated by an external consultant from another university as well as by several internal advisors. In addition, Students are required to participate in course evaluation surveys at the end of each semester (AOQ 28, see the forms of student evaluation surveys in AOQ, Annex 1).

With regard to didactic concepts applied in the program, the University emphasizes the significance of interaction between students and teachers. Students should be motivated through practice in real-life circumstances. Among methods of teaching used in the program, the University names in-class lecturing, tutorial discussions, homework assignments, practical sessions, case studies, field visits, presentations, and report writing (Annex 9). These methods are claimed to contribute to the development of students' critical thinking as well as their independent learning and working capacities. At the last academic stages of the program, students are expected to do a research project, which involves literature review, application of theory in practice, collecting data, result analyses and discussions (Self-Evaluation Report, 1.2.4).

Concerning the integration of electronic and multimedia forms of instruction and learning, it is stated that members of the teaching staff use power point presentations, online resources in lectures and clinical sessions. Soft copies of lectures are made available several days in advance.

Practice is integrated into the program curriculum starting with the 3<sup>rd</sup> year of studies through practical classes in the courses “Medical Nutrition Therapy” I and II, each awarded 4 study units. Clinical practice is implemented in the 4<sup>th</sup> year of studies through practice at the University Hospital in the courses “Clinical Rotation in Medical Nutrition Therapy” I and II, each awarded 6 study units.

Students of the program are engaged in research in first half of the 4<sup>th</sup> year of studies through the course *Research Methods in Health Sciences*. In the second half of the fourth year, they have to accomplish a mandatory course *Student Research Project*, which is a senior-level course that must be completed under the supervision of a faculty member. This final research work is awarded with 2 study units. Upon completion of the research, students have to prepare a report about the work and results they have achieved and then present it in front of an examining committee (refer to the Self-Evaluation Report 1.2.7 to see the objectives of the research course).

After the completion of all courses and study requirements, students can begin their clinical internship year (12 months) either at the University Hospital or other health care institutions approved by the University. The internship consists of 6 rotations each lasting for 2 months (for details about the rotations, see AOQ, Annex 2); it starts at the beginning of August and ends by July of the next year. Students work for 5 days a week, 8 hours a day. They are supervised and guided both by the hospital dietetic team and the academic staff of the Clinical Nutrition Department.

Internship regulations, learning objectives, evaluation form of students' performance in each rotation and attendance tables are provided in the *Intern's Logbook* of the Clinical Nutrition Department (AOQ, Annex 2). Thus, by the end of the clinical internship, trainees are expected to be able to examine and assess the nutritional status of a patient, to calculate enteral and parental feeding, to interpret laboratory values and to develop nutrition care plans. Besides, students improve their knowledge of medical terminology, principles of nutrition care in certain diseases and medical/surgical procedures during the internship. Finally, they gain experience of working in health care teams (AOQ 31).

Students' performance is assessed by the hospital supervisor at the end of each rotation in terms of a scale from 1 to 5 and comments on strengths, limitations and areas of improvement of each student. Students are also required to continuously fill in a self-evaluation table in the course of the internship, where they mark the competences and practices that they have performed. Besides, they submit a



feedback form after the completion of each rotation (see the evaluation forms in AOQ Annex 2). Final grades for the internship are assigned to students in the form of 'pass' or 'fail'; students with the total pass grade lower than 60% will have to repeat the whole or a part of the internship year, depending on the decision of the University Internship Committee (AOQ 31).

The University ensures the compliance of the clinical training with the objectives and learning outcomes of the program by inviting external and internal evaluators to review the content and process of training. Quality of practical instruction is ensured by the fact that the person supervising interns (internship coordinator) has to be part of the academic staff of the Department of Clinical Nutrition and have a degree relevant to the sphere. The current internship coordinator holds an MSc (Master of Science) degree, is enlisted as a specialist at the Saudi Council for health care professions and has a five-year experience of working in the given field (Self-Evaluation Report, 2.2.1).

The University states to implement a skill-oriented examination system that complies with the intended educational objectives and outcomes. Course instructors are responsible for the preparation of the final examinations taken at the end of each course. According to the University's regulations, the Faculty Board has the right to determine the examiner, with the recommendation of the Head of the Department (Annex C, Art.33).

Regarding the examination system applied in the Faculty of Applied Medical Sciences, students' performance in the program courses is evaluated through such methods as assignments, course work performance, written, practical exams and oral exams, senior project evaluation and senior seminar evaluation (Annex 8, page 7). These methods can be grouped into two kinds of knowledge assessment procedures:

- Continuous assessments methods, such as assignments, in-class activities, written quizzes, presentations, and case-studies, which are carried out during the semester.
- Final examinations, which are carried out at the end of each semester and which usually consist of 1 written exam, and 1 practical exam held after the 15<sup>th</sup> week of the semester (Self-Evaluation Report 1.2.3).

The percentage ratio of continuous and final assessments varies from 40 to 60%, depending on the course requirements (for details see Annex 2).

Furthermore, the students have to pass clinical exams, which are taken in the 3<sup>rd</sup> and primarily in the 4<sup>th</sup> year of studies and are conducted during the regular exam-

ination periods. Clinical exams are prepared by course instructors; completion of these exams is required for the completion of the whole course AOQ 9).

According to the University examination regulations (Annex C), students can be allowed to complete the course requirements in the following semester upon the recommendation of the course instructor and the subsequent approval of the Department Council. In that case, students' academic record for the course is temporarily estimated as IC (incomplete) and is added to the GPA (grade point average) after they have completed the course. If students do not manage to complete the course, their record for the course will be estimated as F (fail).

Re-examinations or reset examinations take place once a year before the first semester of the following academic year, in other words in late August. In contrast to the regular way of calculating students final grade for a course (40% for continuous evaluations and 60% for final exams), results of re-examination determine students' grade to 100%. Furthermore, regardless of students' performance in the re-examination, they can only obtain the grade D (acceptable) (AOQ 10).

As the University indicates, if students fail in several courses, they are allowed to take re-set examinations and if they fail these exams, students have to repeat the course. If students fail again, they have a chance to take one more re-set exam, failure of which will be followed by the exclusion from the University. Hence, every student has 4 attempts to pass any course of the program (AOQ 8).

The University states that all students have the right to appeal with regard to examination results. In that case, they should, first, approach the course instructor and look at the exam together. If students still disagree with the grade, they can refer to the Head of the Department, who will then assign a member of the department to reassess their examination (AOQ 11).

Students' academic performance in the program "Clinical Nutrition" is evaluated according to the following grading scale applied at the University:

<b>Estimate</b>	<b>Code</b>	<b>Rate from 5</b>	<b>Rate from 4</b>
Super Excellent	A+	5.00	4.00
Excellent	A	4.75	3.75
Super Very Good	B+	4.50	3.50
Very Good	B	4.00	3.00
Super Good	C+	3.50	2.50
Good	C	3.00	2.00
Super Accepted	D+	2.50	1.50
Acceptable	D	2.00	1.00

Failed	F	1.00	0.00
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Table 6: Grading scale

With regard to the compensation measures for students with disabilities and chronic illnesses, the University assures to support them in laboratory classes, registration processes, printing of necessary material and also to supervise them during exams and ceremonies. This is done by the employees of the Special Needs Center and volunteers as well as exam tutors. The Student Disability Services at the Faculty of Applied Sciences claims to provide fair learning opportunities for students with special needs. Thus, the Faculty staff is said to arrange accommodation according to the needs of students with physical restrictions (Self-Evaluation Report, 1.2.4).

#### 2.2.4 Admission requirements

There are two admission procedures at the University: first, students apply for a place in the preparatory year and, second, they apply for a place in one of the programs of the Faculty of Applied Medical Sciences. Admission to the Faculty means that students automatically continue their education in the 2nd year of the program (by that time, students have already finished the 1st year of studies in the preparatory year). Both procedures take place in the time period from June to August.

In order to be admitted to the preparatory year at the University, applicants have to submit a general secondary school certificate or an equivalent and their scores in two standard national exams:

- General Aptitude Test (“Qudrat”) measures critical thinking skills
- General Achievement Test (“Tahseely”) measures knowledge in Mathematics, Physics, Chemistry, Biology and English Language

Applicants are admitted to the preparatory year based on their achievements in these tests. The total score of an applicant is calculated according to the percentage distribution of scores: 50% is defined by the school certificate grade, 25% by score in the general aptitude test and 25% by the score in the achievement test. The preparatory year enrollment conditions are regulated by the University Dean-ship of Admission and Registration and the College.

In order to be admitted to the Faculty, in other words to the second year of the program, students have to complete the preparatory year with an average grade not lower than 2.00 out of 4.00. Furthermore, students need to show interest in working in a hospital environment and in dealing with patients. Finally, they have

to pass the medical investigation, meaning that students must declare whether they suffer from contagious diseases, diabetic disorders and whether they have any restrictions in physical abilities, which might prevent them from fulfilling the requirements of the study program. The same admission regulation applies to foreign students as well (AOQ 3).

Students' Admission to the Faculty is determined by three factors: 1) competition based on students' average grade for the preparatory year, 2) enrollment capacity of the Faculty, and 3) by the admission standards of the Faculty Board (Annex B). Students have to apply through the University e-service system "ODUS PLUS" within a given period of time after the completion of the preparatory year.

According to the requirements of the Faculty of Applied Medical Sciences, male students are admitted to the program with the grade 4.00 – 5.00 and female students with the grade 4.50 – 5.00. Such a difference in the admission grade is explained with the fact that there are more female students than male so the University strives to provide equal chances for both groups of students (AOQ 4).

After the enrollment to the Faculty, students choose three programs from those offered in the Faculty and determine the degree of priority of these programs. As the final step, applicants are interviewed by the admission committee of the relevant department, where they are expected to reveal enthusiasm for working in the chosen sphere of medical care (Self-Evaluation Report 1.5.1).

With regard to the transfer regulations of the University, students from other higher education institutions are accepted if they transfer from an accredited faculty or university, if they do not have a record of dismissal from the previous university for disciplinary reasons and if their cumulative average grade is not less than 3 (out of 5) or 2 (out of 4), or constitutes 75% of the maximum performance. Besides, students transferred from other universities have to complete at least 50% of the program in order to graduate from King Abdul-Aziz University (Annex C).

According to the University, the Faculty of Applied Medical Sciences requires applicants to be physically fit. When students receive an injury or develop any disabilities after the admission to the respective programs, they have the opportunity to transfer to another program or faculty of the University according to the applied transfer regulations (AOQ 18).

## 2.3 Study conditions and quality assurance

### 2.3.1 Human resources

The teaching staff of the bachelor's degree program "Clinical Nutrition" comprises 15 members, of whom 10 are full-time University teachers and 5 are part-time adjunct teachers. Among the full-time teaching staff, there are 4 associate professor and 6 assistant professors; among the part-time teaching staff, there is one associate professor, one assistant professor, and three dietitians (see Annex 6 and CVs of the teaching staff in Annex 7).

The teaching workload in case of full-time employment constitutes 16 hours per week for demonstrators, 14 hours per week for assistant professors, and 12 hours per week for associate professors (Annex6). Based on these standards, the University claims that the optimal number of the teaching staff in the program should be 18 people. Given the fact that the actual amount of teachers is 15 people, the program needs 3 more teachers.

The majority of full-time staff members are involved in teaching of 4 out of 28 program specific courses, which constitutes approximately 14% of the content of the study program. The part-time teaching staff members teach 1 out of 28 program specific courses, which constitute approximately 3.8% of the content of the study program (Annex 6).

According to the Saudi National Commission for Academic Accreditation and Assessment (NCAAA), the ideal student-teacher ratio on the program should be 8:1, i.e. eight students per one teacher (Annex 6). At the moment, there are in total 92 students studying in the department of Clinical Nutrition (Self-Evaluation Report, 3.2.1). Taking into consideration the amount of full-time teaching staff, the actual student-teacher ratio constitutes 92:10, which is approximately 9:1, i.e. 9 students per one teacher. In Annex 6, the University shows that there is a certain shortage in human resources at the Department.

With regard to the aspect of selection of the teaching staff, it is emphasized that the Department and the University in general have an established system of recruitment for academic positions. According to the University regulations (Annex D), open positions are publicly announced in local and international newspapers. As the main selection criteria, the University names the academic degree, teaching experience in the relevant field, amount of publications and reference letters. Furthermore, applicants for an academic position have to pass an interview by the

department committee and then by the faculty committee, after which the University Scientific Council takes the final decision (AOQ 19).

Promotion to a higher position is only possible for PhD holders who work at the department as assistant professors. Having worked for at least 4 years at the University, they can be advanced to the position of an associate and a full professor. Promotion criteria include the length of working in the initial position, scientific activity and number of publications. Thus, an assistant professor has to have 4 publications whereas an associate professor is required to complete 6 publications. Applications for promotion are then submitted to the department chairman upon whose approval the application is forwarded to the faculty vice-dean for post-graduate studies, who reviews and then forwards the documents to the University central committee for promotion (AOQ 20).

It is stated that the Faculty offers the teaching members of the institution various seminars and workshops to develop as well as learn new methods and techniques of teaching. There is a Center for Teaching and Learning Development<sup>4</sup> within the University, which holds periodical workshops on optimization of teaching and education technologies, student assessment methods, creation of better learning environment, and other topics relevant to the professional development of the Faculty and the University in general. Moreover, faculty members are encouraged to attend national and international conferences and meetings (Self-Evaluation Report, 2.1.3). Please see a list of national and international workshops, conferences, and scientific meetings attended by the teachers of the Clinical Nutrition Department (AOQ Annex 2).

Further human resources of the Department include 2 members of the administrative staff, 1 technician and 2 volunteer technicians (AOQ 36). As indicated in Annex 6, the ideal number of technicians should be 8 people and the number of the administrative staff should be equal to 3 people. Hence, there is a vivid lack of technicians in the program.

### **2.3.2 Facilities**

The Department of Clinical Nutrition has 3 lecture rooms: two of them are designed to accommodate from 80 to 95 students, and the third one has the capacity

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<sup>4</sup> Visit the website: [http://ctld.kau.edu.sa/Default.aspx?Site\\_ID=322&Lng=EN](http://ctld.kau.edu.sa/Default.aspx?Site_ID=322&Lng=EN) (24.03.2015)

of 120 seats. Furthermore, there are 4 laboratories, 1 clinic laboratory and 1 student workstation at the Clinical Nutrition Department.

Students of the Department can use the resources of the Central Library, the library at King Fahd Center for Medical Research and the library of King Abdul-Aziz University Hospital. The Medical Library of the University has female and male sections.

The branch libraries include: male medical center library in the male campus, female medical center library in the female campus and the library of the University Hospital (AOQ 22). Access to the digital library resources is possible with a Student ID 24 hours a day<sup>5</sup>. Students of the program have access to the central Library and the branch libraries during the following hours:

<b>Library</b>	<b>General opening hours</b>	<b>Opening hours for female students only</b>
The central Library	- Sunday to Thursday: 7:30 – 22:00 - Saturday: 17:00 – 21:00	- Saturday: 9:00 –15:00
The branch libraries	- Sunday to Thursday: 7:30 – 21:30	

Table 7: Opening hours of the libraries

Concerning the acquisition of program-related learning material, it is annually selected according to the requirements of the teaching staff. The list of necessary literature is then submitted to the library administration responsible for purchase of library units (Self-Evaluation Report, 2.3.2).

With regard to computer and media equipment, there are 25 computers that serve all staff members of the Department and 20 computers in the computer laboratory. Internet is available for teachers and students through their university identification number. Furthermore, each class is equipped with computers and data show projects (Self-Evaluation Report 2.3.3).

The main source of financial support for the King Abdul-Aziz University is the Ministry of Higher Education of Saudi Arabia. The Department of Clinical Nutrition is annually assigned an established amount of funds for various maintenance purposes. Besides that, every three years the Department receives extra money for new equipment. It is the central University Administration who forwards requests

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<sup>5</sup> The University digital library: [http://library.kau.edu.sa/Default.aspx?Site\\_ID=212&lng=EN](http://library.kau.edu.sa/Default.aspx?Site_ID=212&lng=EN) (24.03.2015)

on funding to the Ministry of Higher Education. Financial support for research projects is granted by research organizations, such as Deanship of Scientific Research of KAU, King Fahd Research Centre, and King Abdul-Aziz City for Science and Technology (Self-Evaluation Report, 2.3.4).

Together with the Self-Evaluation Report, the University has submitted a Declaration where the Dean of the Faculty of Applied Medical Sciences announces that the King Abdul-Aziz University and the Faculty are committed to provide students with facilities and equipment necessary for education in study programs, including those of “Clinical Nutrition”, “Diagnostic Radiology”, and Physical Therapy” (see Annex A).

### **2.3.3 Quality assurance**

Quality management is maintained at the King Abdul-Aziz University by the University Secretary for Development, which was established in 2004. The main function of the Secretary for Development is to supervise and manage co-working of the following departments and bodies of the University: Academic Assessment Unit (AAU), Total Quality Management Unit (TQM), and Center for University Education Development, Academic Accreditation Unit, Administrative Development Department, and the Strategic Planning Department (Self-Evaluation Report 1.6.1).

The AAU is responsible for design and review of electronic questionnaires, data analyses and their report as well as for the conduct of workshops and research consultations. The TQM Unit is an advisory body that focuses on planning implementation and evaluation of quality assurance and development procedures. The Academic Accreditation Unit develops accreditation policies, reviews academic accreditation mechanisms, and determines the requirements to international accreditation bodies and etc. The Administrative Development Department promotes the application of national and international standards of quality management systems as part of the professional conduct of the University employees. The Center for University Education Development supports and encourages professional growth of academic instructors and the improvement of teaching methods and modern teaching technologies (for details on the functions of each unit see AOQ 13, pages 4-5).

According to the University, all units and stakeholders participate in quality assurance procedures. Academic instructors are required to prepare course reports at the end of each semester, which include the description of the course delivery,



analyses of achieved results, resources and facilities used in the course, evaluation methods and other relevant aspects (see the form for a course reform in AOQ Annex 1, pages 1-8). These reports are submitted to the University Secretary for Development. The Secretary for Development is in the first year of its establishment and is currently in the process of reviewing the reports and studying the procedure of how and to what departments/colleges the obtained results will be made available.

Students are also integrated into the internal quality assurance process of the University. At the end of each semester, they have meetings with the head of their department. Furthermore, they are required to give feedback on the courses they attended by filling in an evaluation survey (see the form of a course evaluation survey in AOQ Annex 1). Course coordinators compare students' evaluation results with the objectives of the course and then formulate their own suggestion on what and how should be improved. Then they discuss and exchange their suggestions as well as experiences during the departmental meetings (Self-Evaluation Report 1.6.3).

Practical relevance of the study program "Clinical Nutrition" is maintained through the involvement of external independent advisers and prospective employers in the evaluation process. Representatives of accredited clinical nutrition programs of other universities are invited as independent advisers at the end of each academic year to review course portfolios, visit program laboratories and clinical training premises, interview students as well as speak to the academic and hospital based training staff in order to evaluate and give feedback of the functioning of the study program. At the same time, survey questionnaires are distributed to all hospital dietetics directors, where graduates of the program "Clinical Nutrition" are employed. Through these surveys, the University intends to obtain information on professional skills and knowledge that are expected of program graduates at places of work. Moreover, analyses of these surveys are claimed to reveal the graduates' potentials for further professional growth (Self-Evaluation Report 1.6.4).

As it was mentioned earlier, academic feasibility of students' workload, as well as correlation between the learning objectives of each course and of the internship year with those of the program are assessed and assured through course and internship evaluation and alumni surveys completed by students at different stages of their studies at the University.

As for the rationality of students' workload, it is discussed among students in regular meetings with student leaders (Self-Evaluation Report 1.6.5). Students can also

discuss the workload-related questions with advisors, who are assigned to supervise students, and with the Head of the Department during the meetings taking place at the end of each semester.

All students in the program “Clinical Nutrition” are female; the University is currently considering the establishment of a male section at the Department.

In accordance with the Self-Evaluation Report, 1.6.7, the University implements transparent publication of information about its faculties and colleges. The official website of the Clinical Nutrition Department<sup>6</sup> provides information about the study plan, admission and graduation requirements, employment opportunities, contact information about the teaching staff and other aspects. The University issues also handouts and brochures on the news and activities carried out at the department.

With regard to supervision of students with special medical needs or disabilities, the University has established the Special Needs Centre; its main purpose is to help student with registration, organize training and rehabilitation courses for students to acquire technologies for learning and everyday activities. Furthermore, the center provides special hostelry and reading material in Braille for blind students. Tutors from the Centre and volunteers assist disabled students during exams and the graduation ceremony (Self-Evaluation Report 1.6.7).

As for general academic support and counselling mechanisms, the University established an Academic Advising Unit for this purpose. Students receive guidance from the academic advisor assigned to them at the beginning of each academic year. Besides, each teacher and tutor has specific office hours and they can also be contacted through the website of the University and per e-mail (Self-Evaluation Report, 1.6.8).

The University states that the Ministry of Higher Education provides equal participation of female and male students in all forms of education. The Department of Clinical Nutrition informs that at the moment it has only female students, but there is a consideration to open a male section in the program in the future (Self-Evaluation Report 1.6.9).

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<sup>6</sup> See: [http://nut.kau.edu.sa/Default.aspx?Site\\_ID=142006&Ing=EN](http://nut.kau.edu.sa/Default.aspx?Site_ID=142006&Ing=EN) (24.03.2015)

## 2.4 Institutional context

The King Abdul-Aziz University was founded in 1967 to serve the needs of the western territories of Saudi Arabia. The College of Economics and Management was the first to be established, followed by the College of Arts and Humanities. Currently, the University encompasses 25 faculties and branch faculties offering education for over 52,000 students. More information is available on the website of the University<sup>7</sup>.

The University has one campus divided into two sections: one for male and one for female students. It is assured that each campus is provided with equal and sufficient amount learning and teaching resources, recreation and sport facilities.

With regard to the information on important institutes and research facilities, the University names the King Fahd Medical Research Centre established in 1980. This research center provides laboratories as well as scientific and administrative support for researchers from different faculties of the University. Another important institution of the University is the King Abdul-Aziz University Hospital; its premises serve the purpose of education and training of students from medical study programs.

The Faculty of Applied Medical Sciences was established in 2003. In the year 2005, the first batches of students were admitted to the programs “Clinical Nutrition”, “Diagnostic Radiology” and “Physical Therapy”. The total number of students in all four programs of the Faculty is 722 people. There are 92 students at the Department of Clinical Nutrition, 116 students at the Department of Diagnostic Radiology and 191 students at the Department of Physical Therapy.

As for the current developments carried out in the Faculty of Applied Medical Sciences, the Department of Physical Therapy will be re-established into the Faculty of Medical Rehabilitation in the coming academic year 2015/2016. Furthermore, master’s degree programs will be established in the departments of Medical Technology and Physical Therapy.

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<sup>7</sup> See: [http://www.kau.edu.sa/home\\_english.aspx](http://www.kau.edu.sa/home_english.aspx) (24.03.2015)

### 3 Expert report

#### 3.1 Preliminary remarks

Study programs of King Abdul-Aziz University, Jeddah, Kingdom of Saudi Arabia, are required by the decision of the University to be accredited by an international accreditation agency. The accreditation criteria of the Accreditation Agency in Health and Social Science (AHPGS) are the basis for the accreditation decision. These criteria can be found on the website of the AHPGS<sup>8</sup>. The accreditation criteria are developed by the AHPGS in close accordance with the existing criteria and requirements valid in the Federal Republic of Germany and based on the “Standards and Guidelines for Quality Assurance in the European Higher Education Area” (ESG), established by the European Association for Quality Assurance in Higher Education (ENQA).

The criteria are divided as follows:

- 1) Program Aims and Learning Outcomes,
- 2) Curriculum Design,
- 3) Staff,
- 4) Facilities and Learning Resources,
- 5) Study Process and Student Assessment,
- 6) Program Management.

The main focus of the accreditation procedure is the assessment of learning outcomes and objectives of the study programs, the structure of the study programs, the examination system and transparency, availability of adequate equipment and facilities, study conditions, implementation of the results of quality assurance in terms of the further development of the study programs and the implementation of equal opportunities for all University members involved.

The evaluation of the following study programs offered at King Abdul-Aziz University, with the subsequent decision on their accreditation by the AHPGS, was carried out according to an agreed structure.

As the first step, the documents submitted by the University were reviewed by all nominated experts based on the specified criteria as well as disciplinary and substantive aspects.

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<sup>8</sup>[http://ahpgs.de/wp-content/uploads/2014/11/accred\\_criteria.pdf](http://ahpgs.de/wp-content/uploads/2014/11/accred_criteria.pdf)

As the second step, a part of the nominated expert group carried out an on-site visit at King Abdul-Aziz University, Jeddah, Kingdom of Saudi Arabia with the focus of clarification of open questions as well as verification of the statements described in the application documents of the University.

The third step had been the preparation of the expert report by the expert group. The report is structured in compliance with the accreditation criteria approved by the AHPGS. The documents of the university, the feedback from the experts to the documents and the results of the discussions with the representatives of the University during the on-site visit serve as the basis for the statements made in the expert report.

The last step of the procedure is the decision regarding the accreditation of the study program of King Abdul-Aziz University. The decision is carried out by the Accreditation Commission of AHPGS.

The following study programs were the subjects of the accreditation procedure:

Faculty of Applied Medical Sciences:

- a) "Clinical Nutrition" (Bachelor of Science in Clinical Nutrition);
- b) "Diagnostic Radiology" (Bachelor of Science in Diagnostic Radiology);
- c) "Physical Therapy" (Bachelor of Science in Physical Therapy).

The following experts were appointed by the accreditation commission of the AHPGS for the evaluation of the study program:

**As representatives of academic and health care institutions:**

***Dr. Martin Alfrink***<sup>9</sup>

*General practitioner in Radiotherapy at the Hospital of Coburg, Germany; Medical practitioner responsible for oncological diseases; expert with broad experience in the fields of Radiotherapy and Radiological Medicine*

***Prof. Dr. Anja Bosy-Westphal***

*Professor of Applied Nutrition Sciences and Dietetics at the University of Hohenheim, Stuttgart, Germany; expert in the fields of body composition, obesity, regulation of energy balance and metabolic consequences of its dysregulation*

***Prof. Dr. Christian Grüneberg***

*Professor of Physiotherapy at the University of Applied Medical Sciences*

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<sup>9</sup> The experts shown in italics have participated in the on-site visit of the University.

*Bochum, Germany; Head of the study program “Physiotherapy”; expert in the fields of therapeutical sciences, evidence-based practice in physiotherapy, motion systems and movement control*

**Dr. Dirk Häger**

Head physician at the Psychosomatic Preventive Clinic, Regenesa, Juist, Germany; Team physician at the German Red Cross Blood Donation Service, Niedersachsen, Germany; Bologna expert with broad experience in the area of quality assurance in higher education sector

**Prof. Dr. Gregor Hohenberg**

Professor in the fields of IT, Media and Knowledge Management at Hamm-Lippstadt University of Applied Sciences, Hamm, Germany; expert in medical imaging in Radiological Technology; patent holder in the sphere of multimedia technology

**Prof. Dr. Johannes Keogh**

*Professor of Nursing at Fulda University of Applied Sciences, Fulda, Germany; member of the academic staff responsible for foreign contacts in the study program “Nursing”; expert with a broad experience in theories and methods of nursing, hospital and community nursing, and nursing education*

**Dr. Martina Plaumann**

*Research assistant at the Medical School of Hannover, Hannover, Germany; PhD in Public Health at the Medical School of Hannover; expert in the fields of epidemiology, prevention of diseases and care for specific target groups, and teaching of Public Health and Health Promotion*

**Prof. Dr. Britta Rademacher**

Professor in Engineering and Bioprocess Technologies at Hannover University of Applied Sciences and Art, Hannover, Germany; expert in the spheres of food technology, product development and dairy technologies

**Dr. Werner Reiche**

Head practitioner in neuroradiology and vascular intervention at the Central Institute of Diagnostic and Interventional Radiology at Ludwigshafen Hospital Clinical Care Centre, Germany

**Prof. Dr. Christian Trumpp**

*Professor of Speech Therapy and Neuro/Patho-Linguistics at the Faculty of Health Sciences, IB University of Applied Sciences Berlin, Germany; Rector of the IB University of Applied Sciences Berlin; Chairman of the Academic Senate of Study Program Directors in Speech Therapy*

**Prof. Dr. Mieke Wasner**

*Professor of Physiotherapy, Dean of Studies and a qualified member of the teaching staff responsible for the development of studies in Physiotherapy at the SRH University of Applied Sciences, Heidelberg, Germany; expert in the fields of gerontechnology, geriatrics and sport sciences*

**Prof. Dr. Gertrud Winkler**

Professor in the fields of Nutrition and Food Sciences at Albstadt Sigmaringen University of Applied Sciences, Albstadt and Sigmaringen, Germany; expert in the fields of communal catering, behavioral-economical and nutritional-psychological approaches in the promotion of dining assortment (“choice architecture”)

**As student representatives:****Martha Hofmann**

Student of Medicine at Witten/Herdecke University, Witten, Germany

For the document-based written evaluation of the study program and the on-site visit of the University, the Accreditation Commission of the AHPGS nominated the group of experts. In March-April 2015, the relevant documents were forwarded to the experts to review the available information and determine the strengths, weaknesses and open questions regarding the study programs. The experts' statements from the written evaluations served as the basis in the process of preparation for the on-site visit of the University.

After the University representatives had submitted their responses to the open questions by 11 March 2015, the AHPGS processed and inserted these answers into the program summary. The Self-Evaluation Report, its annexes and the summary of the study program were forwarded to the members of the expert group assigned for the on-site visit.

**3.2 Basic information about the study program**

The main objective of the bachelor study program “Clinical Nutrition” offered at the Faculty of Applied Medical Sciences is to meet the health care needs of the Saudi Arabian community by training specialized dietitians. Its aim is to educate students to apply anthropometric, biochemical, clinical and dietary assessment techniques, to design and implement diet therapy for people of different age and physiological condition. The study program requires the obtainment of 137 credit hours (defined in the program summaries as “study units”) according to the national credit system applied at Saudi Arabian higher education institutions. One credit hour is calculated based on the number of theoretical and practical hours per week.

It is a full-time study program with a regular duration of four years/eight semesters followed by a one-year (12 months) internship. The program curriculum consists of 47 courses, of which 28 (60%) are program specific, nine (19%) are faculty re-

quirement courses taught to all students of the faculty, and ten (21%) are university requirement courses taught to all students at the University.

Students' performance is evaluated based on the results of a Grade Point Average (GPA) and the Cumulative Grade Point Average (CGPA). GPA is calculated by dividing the sum of the credits received in all courses registered during one semester by the total credit hours of the same courses. CGPA is calculated by dividing the total credits received from all courses a student has completed since joining the program by the sum of the credit hours of these courses. According to the University regulations, the passing GPA grade for the program in general is 2.00 out of 5.00, while for an individual course it is 3.00 out of 5.00, in other words 60%.

Admission requirements of the program include a general school certificate or an equivalent document as well as the results of the General Aptitude Test ("Qudrat") and the General Achievement Test ("Tahseely"). The total admission score of an applicant is calculated according to the following percentage distribution: 50% is defined by the school certificate grade, 25% by the score in the general aptitude test and 25% by the score in the achievement test. In order to be admitted to the faculty students have to complete the preparatory year with an average grade not lower than 2.00 out of 4.00.

There are 30 seats annually available in the study program. Admission takes place every winter semester. The Department of Clinical Nutrition admits at the moment only female students to the program; the administration considers the establishment of a male section in the coming years. Upon completion of studies, students receive the academic title "Bachelor of Science in Clinical Nutrition". The first batch of students has been admitted to the program in 2005/2006. Since then, the program has prepared more than 90 nutrition specialists. In the academic year 2013/2014, there have been 24 graduates in the program.

### **3.3 Expert report**

The on-site visit took place on 9 and 10 November 2015 according to the previously agreed schedule. Representatives from the central office of the AHPGS accompanied the expert group during the on-site visit.

The expert group met on 8 November for the initial discussion and briefing by the APHGS prior to the on-site visit. They discussed the submitted application documents and the results of the written evaluations, as well as the accreditation-related questions and foreseeable problems. Furthermore, they prepared the plan



of the on-site visit at King Abdul-Aziz University and the associated transportation logistics.

In the course of the on-site visit, the experts conducted open discussions with the representatives of the University management, members of the Faculty of Applied Medical Sciences, program directors and teachers, as well as with a group of students currently studying in the evaluated study program. Furthermore, the experts had a chance to examine the facilities and equipment of program laboratories, lecture and seminar halls as well as of the library study areas.

The expert report is structured in compliance with the accreditation criteria approved by the AHPGS. The study program will be discussed in a comprehensive manner below. The documents of the University, the written reviews of the application documents by the experts, the impressions from the on-site visit and the results of the discussions with the university representatives serve as basis for the statements made in the expert report.

### **3.3.0 Introduction and comprehensive remarks**

King Abdul-Aziz University, Jeddah, Kingdom of Saudi Arabia, was established in 1967 to service the needs of the western territories of Saudi Arabia. Currently, there are more than 52,000 students studying at the University. The University encompasses 25 faculties and branch faculties and it has two separate campuses for female and male students. Each campus is provided with all cultural, recreation and sport facilities and a library.

One of the main research institutes of the University is the King Fahd Medical Research Centre, which was established in 1980. It offers its laboratories and also provides scientific and administrative support for researchers from different faculties of the University. The research center cooperates with other universities and health care institutions of the country. King Abdul-Aziz University has its own hospital and it serves the purpose of education and training of students of medical study programs.

King Abdul-Aziz University is considered to be among the first universities providing education to female students. Apart from regular study programs, the University offers online distance learning opportunities with the help of modern teaching technologies.

One of the long-term goals of the University is the development of standards for the evaluation of student performance, implementation of high-quality research

programs as well as the optimal investment of the University resources and capacities. Taking these objectives into account, the University considers the accreditation of its study programs by external international experts as an important source of valuable feedback and an effective impetus for the improvement of teaching and study processes.

The study programs assigned for accreditation are offered by the Faculty of Applied Medical Sciences, which was established in 2003. The faculty contains four departments, each offering one study program (Clinical Nutrition, Diagnostic Radiology, Physical Therapy and Medical Laboratory Technology). The first batch of students was admitted to all programs in the year 2005. The current total number of students is 92 in the Department of Clinical Nutrition, 116 in the Department of Diagnostic Radiology and 191 in the Department of Physical Therapy.

### **3.3.1 Program Aims and learning outcomes**

The study program “Clinical Nutrition” pursues the objective to prepare highly qualified specialists capable of serving the country in the sphere of clinical nutrition including clinical dietetics, community nutrition and food service management. By the end of their studies, graduates are able to apply anthropometric, biochemical, clinical and dietary assessment techniques, to design and implement diet therapy and counseling, to measure overweight and obesity in children, adolescents and adults. Furthermore, graduates learn about the nutritional needs associated with different physiological states (pregnancy, athletic performance, different age groups) and about pathophysiological changes that accompany diseases.

The program trains students to recognize and deal with frequent nutritional problems of various groups vulnerable to specific health problems. Students learn to design clearly structured questionnaires for patients, to collect and then effectively apply the received answers for the management of patients’ nutrition. With regard to research-related skills, students learn to conduct a survey and analyze scientific material. The program envisages development of communication skills in oral and written English, team-work abilities, and improvement of computational and statistical skills, which are necessary when transforming the collected data into meaningful conclusions and recommendations.

The description of the program’s qualification objectives and learning outcomes provided in the written documents is clear and consistent with the mission of the University as well as with the needs of the local community. Given the fact that

there is only one dietician for over 18,122 inhabitants of the country, the program helps alleviate the lack of health care professionals in the given field.

From the expert point of view, the Bachelor program “Clinical Nutrition” can be assessed as a well-designed program that covers all important topics of the field of dietetics and nutrition management. The compilation and the succession of the program courses are competence-oriented and enable the consistent and wholesome development of students’ knowledge and abilities. The courses build up on each other and, thus, create a continuous education process, with the increasing scope and complexity of the learning material. Herewith, it is assured, that the students have opportunities to deepen and broaden their knowledge in the given field of science, and are subsequently well prepared for their future professional life.

The program foresees the development of scientific skills from the beginning of the education process. This includes early integration of scientific literature and the use of evidence-based learning in medicine. The students of the program are engaged in small-scale research projects, which they have to document in the form of a report. Moreover, students can contribute to the conceptualization and implementation of community-based education campaigns and intervention projects. The discussions with the student group revealed that the aspect of continuous personal development also constitutes an essential part of studies in the program.

It must be highlighted that the study program introduces practical skills and the opportunities for interaction with patients at an early stage of studies.

The expert group underlines the need for the program graduates in Saudi Arabian society, like in many other countries, due to the increasing level of chronic life-style related diseases as a result of unbalanced diet and lack of physical exercise. It is expected that this trend will further intensify in the coming years, which creates a substantial demand for dietitians. Here, the program fills the gap between increasing problems of nutrition-related diseases (e.g. obesity or type 2 diabetes) and the currently available community-based prevention and clinical treatment.

Considering further development opportunities, the experts strongly encourage the program administration to broaden the scope of intended professional objectives and possible occupations. Regarding the last point, the experts emphasize that the study program is very much focused on nutritional care within clinical context, whereas it has the potential to offer a larger variety of specializations in food-related spheres, e.g. in food industry and community-based healthcare. Therefore,

the experts recommend the University to modify and to diversify the program content, for example through the introduction of elective courses, which will foster possibilities for different specializations. In this way, the program could integrate a larger scope of learning outcomes and, thus, provide the program graduates with more opportunities in the labor market.

Overall, the expert group concludes that the requirements of the criterion are fully met.

### **3.3.2 Curriculum design**

The study programs of the College of Applied Medical Sciences are structured according to the following three main requirements:

- University requirement courses; they are obligatory for all students enrolled at the University and are taught mainly in the second and third years of study in the program.
- Faculty requirement courses; they are obligatory for students of a certain faculty and specialization and are usually offered in the first foundation year and also at the beginning of the second year of studies.
- Department requirement courses; they are specific for the program and are taught by the teaching staff of the department from the second to the fourth year of studies.

The study program “Clinical Nutrition” comprises 47 courses, of which 28 (60%) are program specific, nine (19%) are faculty requirement courses taught to all students of the faculty, and ten (21%) are university requirement courses taught to all students at the University. The regular study period in the program is four years/eight semesters followed by one year of clinical internship.

Students start their education at the University with the preparatory year, which comprises basic courses in English, biology, physics, chemistry, computer and communication skills. The following three years of the program focus on specialization courses combined with university and faculty requirement courses.

After the completion of all courses and study requirements, students can begin their clinical internship year (12 months) either at the University Hospital or other health care institutions approved by the University. The internship consists of six rotations each lasting for two months. Students work for five days a week, eight hours a day. They are supervised and guided both by the hospital dietetic team

and the academic staff of the Clinical Nutrition Department. Internship regulations, learning objectives, evaluation form of students' performance in each rotation and attendance tables are provided in the Intern's Logbook of the Clinical Nutrition department.

The experts came to the conclusion that the program curriculum contains all courses that are essential for higher education in nutrition sciences. The experts have positively evaluated the fact that the program requires students to complete basic courses before they can attend subjects offering in-depth perspective and analyses in clinical nutrition. It is also important that the program successfully combines theoretical knowledge with practical experience.

For further development of the program, the experts refer to the recommendation articulated for the first criterion, namely that students should have opportunities to elect courses of specialization. Such a choice is considered by the experts as advantageous due to the following reasons: first of all, the study program could provide students with opportunities for expertise not only in one but several specializations and, thus prepare them for new job opportunities, for instance in food industry, consumer advice centers or public health authorities; second, such a choice requires of students a more self-reflective and conscious approach towards their education and professional career; finally, such elective courses could contribute to the establishment of interdisciplinary exchange between different departments and colleges of the University.

Another important suggestion of the expert group is the introduction of an individual course or classes that are not only partially but fully dedicated to the preparation of food based on the standards and requirements of nutritional health care. In these classes students should acquire highly professional competences for preparing balanced diet for healthy people (e.g. providing basic cooking skills and food knowledge, kitchen hygiene and food storage), but also dietary dishes for people with certain diseases (e.g. baking with gluten-free flour for patients with celiac disease, preparing a protein-modified and potassium-/phosphate- restricted diet for patients with chronic kidney failure). Such cooking classes require, however, a large and fully equipped kitchen with sufficient number of working area and professional utensils. During the on-site visit, the experts witnessed that the Department of Clinical Nutrition should work on the enhancement of its kitchen area and subsequently on the establishment of more specialized practical sessions in cooking.

As a medium-term plan, the experts encourage the Department of Clinical Nutrition to establish its own Master study program in the same field of sciences. However, they admit that such a project is only then reasonable and implementable, when a sufficient number of qualified teaching staff is available. Therefore, the experts support the statement of the University to wait with the establishment of a postgraduate program until there are possibilities to recruit additional academic and administrative forces.

The experts are convinced that the study program and the Faculty of Applied Medical Sciences in general could considerably enrich the expertise of their teaching staff and intensify the engagement of students in the academic and social life of the University through the establishment of contacts with other Saudi Arabian universities. Such contacts should encompass mutual exchange opportunities for learning and teaching at other national higher education institution for a specific amount of time. Due to cultural aspects, it could be a positive option to start with short-term exchange periods, e.g. summer schools lasting for one or several weeks.

The same ideas apply to the experts' advice to initiate international collaborations with foreign higher education institutions. The experts emphasize that the aspect of internationality is one of the crucial constituents of modern societies and higher education. Therefore, they suggest the program administration and the faculty to launch student and teacher exchange projects with universities abroad. The experts believe, for instance, that inviting international scientists to teach for one or several semesters would allow students to receive a better insight into nutritional health care methods in other countries. At the same time, the program teachers could share their own experience in dealing with dietetics-related questions with international peers and students while working as guest professors, lecturers or researchers at universities abroad. The organization of student exchange opportunities for both local and visiting students from other universities will also positively enhance the faculty's role on the international academic stage.

Overall, the expert group concludes that the requirements of the criterion are fully met.

### **3.3.3 Staff**

The teaching staff of the bachelor's degree program "Clinical Nutrition" comprises 10 members with a PhD degree employed on a full-time basis, of whom two are associate professors and eight are assistant professors. There is one dietician

employed on a part-time basis. Further human resources of the Clinical Nutrition Department include five members of the administrative staff, one technician and two laboratory specialists.

At the moment, there are 111 students in total studying in the Department of Clinical Nutrition. Taking into consideration the number of full-time teaching staff, the actual student-teacher ratio constitutes 11 students per one teacher.

From the experts' point of view, the courses related to nutrition aspects seem to be sufficiently ensured. It must be highlighted, that nearly all responsible people for the program studied abroad gaining their academic degree at renowned universities.

Overall, the teaching and academic staff of the University shows a very high level of commitment and potential for the execution as well as further development of the study program they are responsible for. The expert group came to the conclusion that there is a strong corporate identity and positive group dynamics among the University and the faculty administrations.

As the main selection criteria, the University names the academic degree, teaching experience in the relevant field, amount of publications and reference letters. Furthermore, applicants for the academic position have to pass an interview by the department committee and then by the faculty committee, after which the University Scientific Council takes the final decision. Promotion to a higher position is possible only for PhD holders who work at the department as assistant professors, having worked for at least four years at the University. Promotion criteria include the length of working in the initial position, scientific activity and number of publications. Thus, an assistant professor has to have four publications whereas an associate professor is required to complete six publications.

The academic staff of the Department of Clinical Nutrition offers extensive support to its students.

Members of the program teaching staff participate in a number of national and international workshops and conferences, and are active in various academic research projects. This guarantees that they stay up to date with the global developments in the field of dietetics and food sciences and integrate an international perspective into the teaching process.

From the experts' point of view, the personnel selection criteria of the University are described in a sufficient and transparent manner. The amount of full-time

teaching staff is sufficient for the current number of students. Furthermore, the teaching staff is appropriately and partly highly qualified and experienced for their particular teaching responsibilities. During the on-site visit discussions, students of the Faculty of Applied Sciences have explicitly pointed out that there are sufficient mentors at the University and that they are content with the support system of the institution.

Based on the application documentation and the observations from the on-site visit at the University, the experts have concluded that the academic staff of the program reveals a great potential and interest to participate in further qualification development activities. Taking this into account, the University has established a learning center offering additional education opportunities for both teachers and students. In the course of the on-site visit, the experts have ascertained that the University offers financial support not only to students but also to PhD students as well as to other members of the teaching staff for scientific projects.

Nevertheless, the experts emphasize that the introduction of more opportunities to visit other national as well as international universities to study or to work as guest lecturers could enhance the pedagogical and scientific expertise of the program teaching staff. Such projects will enable the teachers to establish contacts with local academic circles as well as with international peers and scientific organizations.

The expert group evaluates the requirements of the criterion to be fulfilled.

#### **3.3.4 Facilities and learning resources**

The Department of Clinical Nutrition has three lecture rooms: two of them are designed to accommodate from 80 to 95 students, and the third one has the capacity of 120 seats. Furthermore, there are four laboratories, one clinic laboratory and one student workstation in the department.

Students of the department can use the resources of the central library, the library at King Fahd Center for Medical Research, the library of King Abdul-Aziz University Hospital, female or male sections of the Medical Library for female and male students, respectively. In addition, the department library has its own small library containing the core and basic literature used in the program. Access to the digital library resources is possible with a Student ID 24 hours a day.

With regard to computer and media equipment, there are 25 computers that serve all staff members of the department and 20 computers in the computer laboratory.



Internet is available for teachers and students through their university identification number. Furthermore, each class is equipped with computers and data show projects. Here, the online learning platform “Blackboard” has to be positively highlighted.

With a specific view on the laboratories and training premises, the experts came to the conclusion that they meet the needs of the “Clinical Nutrition” program.

The experts give a particularly positive evaluation to the fact that the same learning and training facilities, such as the library and the laboratories, can be used by both female and male students of the program. This enables a more economic and sustainable handling of resources. Thus, both groups of students have set schedule hours when they can access the learning premises.

Regarding further developments of the study program “Clinical Nutrition”, it is recommended to expand the training kitchen, since it appears to be too small and underequipped for the number of enrolled students. The experts underline that the kitchen should serve as an important training area, where students obtain the skills of preparing specific diets according to nutritional needs of patients (see section 1.3.2). Therefore, the experts deem it as necessary to enlarge and equip the kitchen with more utensils. This will allow the program administration to develop and implement highly professional cooking courses into the program curriculum. The experts distinguished the financial potential of the department to increase the number of available places in the program, which will most probably further intensify the demand for a professional kitchen.

To conclude, the program has adequate facilities and equipment as its disposal for the teaching and learning requirements. The use of facilities and equipment is monitored as part of the quality assurance of the program. Hence, they presume that in the course of the construction, the furnishing and equipment

The expert group concludes that the requirements of the criterion are met in full.

### **3.3.5 Study process and student assessment**

In order to be admitted to the preparatory year at the University, applicants have to submit a general secondary school certificate or an equivalent and their scores in two standard national tests. In order to be admitted to the Faculty of Applied Medical Sciences, in other words to the second year of the program, students have to complete the preparatory year with an average grade not lower than 2.00 out of 4.00. Furthermore, they have to pass the medical investigation, meaning that stu-

dents must declare whether they suffer from contagious diseases, diabetes and whether they have any restrictions in physical abilities, which might prevent them from fulfilling the requirements of the study program.

The Department of Clinical Nutrition currently has only female students, but there is a consideration to open the male section of the program in the future. The University asserts its commitment to the provision of equal opportunities for all students. The Special Needs Centre of the University has been established to help students with disabilities and chronic illnesses. The center provides special accommodations and, for example, reading material in Braille for blind students.

Students' Admission to the Faculty of Applied Medical Sciences is determined by three factors: 1) competition based on students' average grade for the preparatory year, 2) enrollment capacity of the faculty, and 3) by the admission standards of the Faculty Board. After the enrollment to the faculty, students choose three programs from those offered in the faculty and determine the degree of priority of these programs. As the final step, applicants are interviewed by the admission committee of the relevant department. The average of 30 places is annually available for the admission of new students.

The expert group evaluates the programs' admission requirements and procedures as well structured. The University' admission structure consists of two stages: first, admission to the preparatory year and then enrollment to a specific study program. It is efficient and adequate taking into account the large number of applicants each year. The University follows the national guidelines for the admission to higher education institutions established by the Saudi Arabian Ministry of Education.

With regard to the criterion of physical fitness as one of the admission requirements in the Faculty of Applied Sciences, the experts are confident that it would be more adequate if specific characteristics of each study program are taken into account. Thus, the enrollment of students with diabetes into the study program "Clinical Nutrition" is certainly reasonable, whereas physical disablement is very likely to produce considerable hindrances in "Physical Therapy" studies. Therefore, the experts recommend the faculty to prepare a program-specific definition of the criterion of physical fitness according to the learning and training content of each study program.

Transfer and recognition of academic credits acquired at other higher education institutions is possible if these students transfer from an accredited and recognized university, do not have a record of dismissal, and can provide the cumulative av-

average grade of 3.00 out of 5.00 or 2.00 out of 4.00. Besides, they have to complete at least 50% of the program in order to graduate from King Abdul-Aziz University.

Coherence and rationality of the study plan, module succession and students workload in different stages of studies are calculated and established on the basis of regulated class contacts, independent study time given for the completion of the set assignments, and the preparation phase for the final exams.

The study program does not maintain any direct cooperation or exchange projects with other national or international higher education institutions. The experts are confident that mobility of students and teachers, as well as the development and implementation of international exchange opportunities, constitute the indispensable part of modern education. Therefore, as it has already been mentioned, they strongly recommend the department and the faculty to introduce possibilities for student and teacher exchange.

Students' performance is assessed in the study program by means of continuous evaluations carried out during the semester and final examinations carried out at the end of each semester. The percentage ratio of continuous and final assessments varies from 40 to 60%, depending on the course requirements. In addition, students have to pass clinical exams, taken primarily in the fourth year of studies. Re-examinations or reset examinations take place once a year before the first semester of the following academic year. Every student has four attempts to pass any course of the program. The University has regulations and procedures enabling students to issue an appeal with regard to examination results.

From the experts' point of view, the examination system of the University is competence-oriented; it adequately evaluates students' understanding of the learning material as well as their performance in practical classes. Nevertheless, the experts recommend rethinking of the examination scope and the size of the program courses. In total, the program consists of 47 courses, each completed with a respective examination, which leads to a high level of examination load for students. Taking this into account, the experts suggest the program administration to elaborate upon the combination of courses into larger units like modules that are finished with a single module-related examination. As a source of additional information about the design of modules, the experts refer to the document "ECTS User's Guide", which is applied within the European higher education area.

Feasibility of students' workload, examination requirements and training assignments is evaluated and guaranteed by means of course and internship questionnaires for current students and graduates. From the experts' point of view, the

University should maintain an attentive overview of graduates' career paths in order to determine insufficiencies as well as development potentials of the study program "Clinical Nutrition". Through continuous contact with former students, the University could also effectively detect what knowledge and skills they lack at current employment positions and what additional job opportunities are in general available for the program graduates.

The University publishes the results of the questionnaires and surveys thus making them available to all stakeholders involved.

The Academic Advising Unit of the University is responsible for the general academic support and counselling of students. At the beginning of each academic year, students are assigned to a personal academic advisor. In addition, each teacher and tutor has specific office hours and can also be contacted through the website of the University and per e-mail.

The discussion with students has revealed that the teaching staff of the study program gives high priority to the support of students. There is a wide variety of possibilities for students to take part in the development of the study program, the faculty and the University as a whole. For instance, students can work on their own projects, and for that they receive extensive assistance and guidance from the University. On the whole, the experts were impressed by the academic performance of the program students, who have proven to be critical-thinking and achievement-oriented, and who very much identify themselves with their University and the faculty.

Concerning the integration of research into the program, clinical nutrition students are required to complete a mandatory course dedicated to a research project, which is then awarded with two credit hours. Upon completion of this course, students have to prepare a report about the work and the results they have achieved, and then to present it in front of an examination committee.

Such a report is comparable with a final paper/a bachelor thesis required in European higher education institutions. The experts advise the University to award more credit hours for research projects and the reports. By doing so, the University would reinforce the importance of independent projects and of individual academic engagement in the program. In addition, the experts recommend the department administration to introduce the course "Research Methods" earlier in the program in order to initiate the formation of competences of scholarly work and writing already in the early stages of the higher education process.

The expert group concludes that the requirements of the criterion are fully met.

### **3.3.6 Program management**

The quality assurance system of the University is based on the concept of “Total Quality Management”. It encompasses a number of units and special departments, whose main function is to guarantee the design and review of written and electronic questionnaires, supervision of evaluation procedures, review of accreditation mechanisms, promotion of national and international standards of quality management, provision of opportunities for professional growth of academic instructors and the improvement of teaching technologies.

At the same time, each academic department of the University implements and participates in various quality assurance procedures. The Department of Clinical Nutrition guarantees the quality of the study program “Clinical Nutrition” through the fact that all stakeholders are involved in the internal quality assurance procedures within the department. Hence, students are required to submit evaluation surveys at the end of each course, where they give feedback about the course content, instructors and assessment methods. Course coordinators then compare students’ evaluation results with the objectives of the course and then formulate their own suggestion on what and how should be improved. Academic instructors prepare course reports at the end of each semester, which include the description of the course teaching process, analyses of achieved results, resources and facilities used in the course, evaluation methods and other relevant aspects. These reports are submitted to the University Secretary for Development for further review and analyses.

External independent advisers and prospective employers are involved in the evaluation of the program’s relevance to the professional practice. They review course portfolios, fill in questionnaires, visit program laboratories and clinical training premises, interview students as well as speak to the academic and hospital training staff supervising students. Through these surveys, the University intends to obtain information about professional skills and knowledge required of program graduates upon employment in a health care institution. Thus, the program management continuously controls and ensures the compatibility of the program learning outcomes with the demands of the national labor market.

The experts underline that King Abdul-Aziz University has a very well-structured and comprehensive quality management system, effectively put into use in all teaching and administrative units of the institution.

Regular evaluations of quality are undertaken within each course of the program based on valid evidence, relevant performance indicators, and appropriate benchmarks. The efficiency of stakeholders' participation in this process is demonstrated through the fact that their feedback forms the main component of improvement plans subsequently carried out in the department.

The experts recommend the University and the department to provide more concrete and detailed recording of the positions, where graduates of the program have found an employment. As it has already been explained above, this information can serve as an empirically proven basis for the continuous development of the study program. Apart from the existing needs of the program, it will also be possible to distinguish the upcoming ones and, thus, to react to various challenges in the appropriate manner and in due time.

Moreover, the experts recommend the department to evaluate the current workload of students and of the teaching staff, and consequently compare the obtained results with the initially intended amount of working hours. By doing so, the department could calculate the actual load of work in the program and also assume the necessary measures if there are substantial disparities between expectation and reality. In this regard, the experts underline that although the University refers to the average self-study hours, these hours are not considered when calculating the credit hours. This means that students' self-study time is not reflected in the credit system of the University, although it is an important part of education process and it shows, together with the contact hours, the whole scope of students' input in the study program (please find more information in this regard in the document "ECTS User's Guide"). Therefore, the experts recommend the University to consider not only the contact hours but also the self-study hours when awarding the credit hours and when comparing the actual workload with the intended one.

During the on-site visit of the University, the experts had an opportunity to directly discuss various aspects of education with the management of the study program "Clinical Nutrition". As a result of this direct communication and experience exchange, they came to the conclusion that the quality assurance concept of the program management relies on continuous performance monitoring and comparative evaluations of performance.

Information about the University's institutional structure, vision and objectives, general admission requirements, academic support services, questionnaire fulfillment requirements, alumni inquiry procedures and research paper database is available on the official website of the University. The website contains also infor-

mation about the mission and vision of the Faculty of Applied Medical Sciences, including its admission requirements and procedures, study process specifications, graduation requirements, departments, academic and administrative units and committees, the list of academic personnel and their contact information, annual student meetings, latest news and the descriptions of the administrative positions offered at the faculty. The University website provides a thorough description of the Department of Clinical Nutrition, including its history, goals and objectives, list of academic staff members, employment opportunities for the program graduates, learning material and teaching methods, study plan, admission and graduation requirements and the internship-related information.

During the on-site visit of the University, students and the members of the teaching staff expressed their general contentment with the system of information publication and distribution on all stages of the education and teaching process.

The expert group concludes that the requirements of the criterion are met in full.

### **3.4 Summary**

First of all it should be emphasized that the on-site visit of King Abdul-Aziz University took place in an exceptionally open atmosphere and in the form of mutual respect and appreciation. The experts received extensive and highly competent answers from the representatives of the University to all of their questions and inquiries. As a result, it became obvious that all members of the University – starting with the University and the faculty administration and including the personnel responsible for the study program “Clinical Nutrition” and students – show tremendous engagement and commitment to the success of the University and of the individual study programs. In this respects, the discussion round with the group of students must be highlighted in particular. Students have displayed such motivation and open-mindedness, which is quite rare to come across.

In addition to the overarching aspects that were presented in the introduction to the assessment, the accreditation procedure focused on the qualification objectives, the design and the structure of the study program in particular. Aspects related to quality management, as well as the learning resources, facilities and staff have been discussed.

The expert group underlines the growing demand for clinical nutrition specialists in Saudi Arabian society, like in many other countries, due to the increasing burden of chronic life-style related diseases. It is expected that this trend will further intensify in the coming years, which creates a substantial need for trained dietitians.

From the experts' viewpoint, the study program "Clinical Nutrition" completely fulfils the evaluation criteria described above.

The Bachelor program "Clinical Nutrition" has an adequate program design that assures the acquisition of knowledge by students over the whole period of education. Its objectives meet the requirements of the current job market of the Kingdom of Saudi Arabia. The description of the study program, which consists of four years of full-time study followed by one year of clinical training, is distinct and consistent. The structure and the processes of quality assurance of the program management are described and explained in detail. The study program has a well-functioning teaching and examination system. Learning material, training equipment, digital technologies and other necessary facilities are provided in a sufficient and available manner.

The high quality of the offered courses, the relevance of the study programs to the current needs of the local society, qualified teaching staff and the open-minded attitude of the University towards innovative medical education and equal participation of all students in higher education process make it very attractive for students from all over the country. The location of the University in the city of Jeddah further contributes to its high popularity.

Similar to other higher education institutions in Saudi Arabia, King Abdul-Aziz University currently has to deal with the continuously growing number of applicants and admission rates. This situation creates challenges for the institution in terms of space and material resources as well as the need for additional teaching forces. Accordingly, the experts support the conclusion, that the decision to establish a master study program in "Clinical Nutrition" must be based on the possibility of the University to recruit the necessary number of qualified teaching staff.

The experts came to the conclusion that they will submit a recommendation to the Accreditation Commission of the AHPGS for a positive decision regarding the accreditation of the study program.

Recommendations for all study programs:

- As an overall recommendation for the development of all three study programs, the Faculty of Applied Medical Sciences should consider the organization of possibilities for students and the faculty members to study or work at partner higher education institutions within Saudi Arabia. Given the cultural aspects, it could be an option to start with short-term exchange periods, e.g. summer schools. For the initiation of internationality, the faculty administration



should also contemplate upon the arrangement of visit and specialty-related studies and teaching possibilities for students and members of the teaching staff at foreign higher education institutions.

- The experts recommend the departments' administrations to rethink the examination scope and the size of the programs' courses. They have determined that the programs consist of many courses, each completed with a respective examination, which leads to a high level of examination load for students. In this regard, the experts suggest combining the courses into larger units like modules that are completed with a single examination. As a source of additional information about the design of modules, the University could refer to the document "ECTS User's Guide" applied within the European higher education area.
- The experts advise the faculty to award more credit hours for research projects and reports required in the study programs. By doing so, the faculty would reinforce the importance of scholarly work and of individual academic engagement in the education process.
- The faculty should maintain communication with its graduates, and it should also attentively follow their career paths in order to determine insufficiencies and development potentials of each study program.
- From the experts' point of view, the respective department should continuously evaluate the current workload of students and of the teaching staff, and consequently compare obtained results with the initially intended amount of working hours. Thereby, it is important to take into account not only the contact hours but also students' self-study hours when calculating the credit hours and when comparing the actual workload with the intended one.
- With regard to the admission requirement of "physical fitness", the experts strongly recommend the faculty to prepare a program-specific definition of the criterion of physical fitness according to the learning and training content of each study program.

Recommendations for the "Clinical Nutrition" program:

- The experts strongly encourage the academic staff of the Department of Clinical Nutrition to broaden the scope of intended professional objectives and possible occupations pursued in the program, e.g. in food industry and community-based healthcare. This will provide the program graduates with more employment opportunities and the flexibility to adapt to the demands of the labor market.

- The experts advise the department staff to design an individual course or more professionalized classes that are focused on the preparation of specific diets according to the standards of nutritional health care.
- In relation to the previous recommendation, the experts advise the program administration to expand and modify the training kitchen of the department, since it appears to be insufficient for the professional level of such cooking classes as well as for the number of enrolled students in the study program.
- The experts encourage the program administration to introduce the course “Research Methods” earlier in the program, in order to initiate the formation of competences of scholarly work and writing already in the early stages of the higher education process.
- Finally, the experts recommend to modify and to diversify the program content, for example through the introduction of elective courses, which will foster possibilities for different specializations.

## **4 Decision of the accreditation commission**

### **The decision of the Accreditation Commission of 18 February 2016**

The resolution of the Accreditation Commission of the AHPGS of 18 February 2016 is based on the University's application documents, the experts' review and the results of the on-site visit described in the expert report. Moreover, the Accreditation Commission took into account the response opinion of the University regarding the study program.

The on-site visit of the University took place on 9 and 10 November 2015 according to the previously agreed schedule.

The accreditation decision is based on the accreditation criteria of the AHPGS. They have been developed in close accordance with the existing standards and requirements valid in the Federal Republic of Germany and based on the "Standards and Guidelines for Quality Assurance in the European Higher Education Area" (ESG), established by the European Association for Quality Assurance in Higher Education (ENQA).

The Accreditation Commission of the AHPGS considers that all accreditation criteria are fulfilled and adopts the following decision:

The bachelor study program "Clinical Nutrition" completed with the academic degree "Bachelor of Science in Clinical Nutrition" is accredited. The regulated study period in the program is four years/eight semesters followed by a one-year internship. The study program comprises 42 courses, of which 27 are program-specific, five are faculty requirement courses taught to all students of the faculty and ten are university requirement courses taught to all students of the University.

The study program "Clinical Nutrition" is accredited for the duration of five years until 30 September 2021.

For further development and enhancement of the study program, as well as of the University as a whole, the Accreditation Commission of the AHPGS supports the recommendations outlined in the expert report.