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 ΣΤΗΝ ΑΝΩΤΑΤΗ ΕΚΠΑΙΔΕΥΣΗ

HELLENIC REPUBLIC  
**H.Q.A.**  
 HELLENIC QUALITY ASSURANCE AND  
 ACCREDITATION AGENCY

## EXTERNAL EVALUATION REPORT

ΤΜΗΜΑ ΕΠΙΣΤΗΜΗΣ ΤΡΟΦΙΜΩΝ ΚΑΙ ΔΙΑΤΡΟΦΗΣ  
 ΠΑΝΕΠΙΣΤΗΜΙΟΥ ΑΙΓΑΙΟΥ

Ιούνιος 2013



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### External Evaluation Committee

The Committee responsible for the External Evaluation of the Department ...ΕΠΙΣΤΗΜΗΣ ΤΡΟΦΙΜΩΝ ΚΑΙ ΔΙΑΤΡΟΦΗΣ..... of the University/Technical Institution of ...ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΙΓΑΙΟΥ..... consisted of the following three (3) expert evaluators drawn from the Registry constituted by the HQAA in accordance with Law 3374/2005 :

1. PROF. VASSILIS GEKAS (President)  
(Title) (Name and Surname)

CYPRUS UNIVERSITY OF TECHNOLOGY  
(Institution of origin)

2. MR RODIOS GAMVROS  
(Title) (Name and Surname)

Expert on Quality, Regulations and Management of Food Companies\_\_\_\_\_  
(Institution of origin)

3. DR DEMETRIOS KAZANTZIS \_\_\_\_\_  
(Title) (Name and Surname)

Vice President of Research and Development DEL's LEMONADE Cranston Rhode Island,USA \_\_\_\_\_  
(Institution of origin)

**N.B.** The structure of the “Template” proposed for the External Evaluation Report mirrors the requirements of Law 3374/2005 and corresponds overall to the structure of the Internal Evaluation Report submitted by the Department.

The length of text in each box is free. Questions included in each box are not exclusive nor should they always be answered separately; they are meant to provide a general outline of matters that should be addressed by the Committee when formulating its comments.

## **Introduction**

### I. The External Evaluation Procedure

- Dates and brief account of the site visit.

The Evaluation Committee visited the department on 18 and 19 June 2013. The Committee reached Lemnos on 17 June 2013 at 21.20

- Whom did the Committee meet?

The Committee met with

- The Vice Rector of Academic affairs of the University who happens to be the temporary Chairman of the Department and the Coordinator of the Internal Evaluation Committee of the department
- The academic staff (ΔΕΠ) of the department
- The PD 407/80 staff of the department
- Administrative personnel
- Undergraduate students of the department. We did not meet any graduate student because the Department has not yet completed a full cycle of its undergraduate curriculum.

Also, the Committee met with the Mayor of Lemnos, Mr Antonis Chadjidiamantis, as well as with business representatives of the local community.

- List of Reports, documents, other data examined by the Committee.

Report of the Internal Evaluation Committee, PPT presentations on the University and the Department, CV's and lists of publications of the academic staff, Student Test Examples, Summary of success/failure data of all courses for two academic years, 2010-11 and 2011-12.

- Groups of teaching and administrative staff and students interviewed

Yes, the Committee met and interviewed with the permanent teaching staff, as well, through SKYPE, with the remaining on assignment teaching staff. Also with the administrative staff, both from Lemnos and Mytilene. The Committee met with an enthusiastic group of 24 students, from all semesters of studies (freshmen, sophomore, junior and senior years). This was an impressive number considering that the students have had finished with their examination obligations and were heading home for the summer break.

- Facilities visited by the External Evaluation Committee.

- the teaching rooms that are located in different buildings and different parts of town in a short walking distance.
- the laboratories of the department
- the offices of the personnel and the academic staff
- the library of the department

## II. The Internal Evaluation Procedure

Please comment on:

- Appropriateness of sources and documentation used

They were adequate and appropriate

- Quality and completeness of evidence reviewed and provided

They were complete and qualitative

- To what extent have the objectives of the internal evaluation process been met by the Department?

The Department reached the objectives of the internal evaluation process in a satisfactory extent and this facilitated the work of the EE Committee.

## **A. Curriculum**

*To be filled separately for each undergraduate, graduate and doctoral programme.*

### APPROACH

- What are the goals and objectives of the Curriculum? What is the plan for achieving them?

The set aims and the scope of the department is its graduated students to be able to develop foods correctly processed and sufficiently safe and examine how food consumption affects public health as well as how social, economic, cultural and psychological factors influence the consumption of foods.

To achieve these goals a comprehensive and coherent curricula have been established with emphasis in nutrition aspects. The Staff of the department realizes that these objectives can be achieved through a profound knowledge of chemistry, microbiology, biodiversity, health and business.

- How were the objectives decided? Which factors were taken into account? Were they set against appropriate standards? Did the unit consult other stakeholders?

The objectives and the curricula were decided according to national, EU and international food standards. The unit did not consult other stakeholders at the beginning but since the start of the function of the department a good cooperation has been established with stakeholders of the local industries and enterprises.

- Is the curriculum consistent with the objectives of the Department and the requirements of the society?

The Committee overall feels that the curriculum is in principle consistent with the objectives and the requirements of the society.

- Has the unit set a procedure for the revision of the curriculum?

Yes, there is a procedure for a minor revision of the curriculum for the next academic year.

### IMPLEMENTATION

- How effectively is the Department's goal implemented by the curriculum?  
Yes it is sufficiently and effectively implemented.
- How does the curriculum compare with appropriate, universally accepted standards for the specific area of study?  
It is adequately compared.
- Is the structure of the curriculum rational and clearly articulated?  
  
Yes it is rationally and clearly articulated
- Is the curriculum coherent and functional?  
It is coherent and functional, however the Committee has some suggestions to make regarding the following topics that might be incorporated in already existing courses or be covered by additional core course or electives: Food analysis, Product development, Food sanitation , Nutrition, Beverage development, Computerized Food Analysis., Fisheries, Psychology.
- Is the material for each course appropriate and the time offered sufficient?  
It is sufficient for the time allocated for each course's theoretical and tutorial part, but for this not entirely satisfactory for the time planned lack of enough space
- Does the Department have the necessary resources and appropriately qualified and trained staff to implement the curriculum?

There is a difficulty with the limited human resources and the small number of the academic staff to implement the curriculum. Currently there are only four elected active members of the academic staff at the ranks of Lecturer and Assistant Professor and there is one more elected member but yet not placed with payment on the department.

### RESULTS

- How well is the implementation achieving the Department's predefined goals and objectives?
- If not, why is it so? How is this problem dealt with?
- Does the Department understand why and how it achieved or failed to achieve these results?

Despite the fact of the shortage in academic staff the Department achieves the goals and objectives thanks to the dedication and high didactic load of the permanent teaching faculty assisted by the PD 407 colleagues.

### IMPROVEMENT

- Does the Department know how the Curriculum should be improved?
- Which improvements does the Department plan to introduce  
Yes, the department is aware of that need and ready to make some minor improvements. Our Committee also suggests some improvements by including a

direction towards the seafood (fisheries) area, not only the food but also the exploitation of the food byproducts and water quality.

## ***B. Teaching***

### APPROACH:

Does the Department have a defined pedagogic policy with regard to teaching approach and methodology?

Please comment on :

- Teaching methods used
- Teaching staff/ student ratio
- Teacher/student collaboration
- Adequacy of means and resources
- Use of information technologies
- Examination system

The comments of the Committee are below at the end of the IMPROVEMENTS sub-chapter.

### IMPLEMENTATION

Please comment on:

- Quality of teaching procedures
- Quality and adequacy of teaching materials and resources.
- Quality of course material. Is it brought up to date?
- Linking of research with teaching
- Mobility of academic staff and students
- Evaluation by the students of (a) the teaching and (b) the course content and study material/resources

### RESULTS

Please comment on:

- Efficacy of teaching.
- Discrepancies in the success/failure percentage between courses and how they are justified.
- Differences between students in (a) the time to graduation, and (b) final degree grades.
- Whether the Department understands the reasons of such positive or negative results?

The Committee understood that there is a defined policy as far as the teaching approach and methodology is concerned. However due to reasons that have been referred to in the Curricula topic above the ratio staff/student is currently too high, and this ratio is somehow reduced when the non permanent staff (PD 407) is included in the consideration. Both the teachers and the students agree that the collaboration, in general, teacher/student is excellent. Adequacy of the means is not quite satisfactory again for reasons of a partly lack of buildings to be used for teaching rooms and laboratories. There is one lab for multiple purposes, i.e. microbiology, chemistry, biochemistry. These various courses should have its own laboratory. There is a laboratory of a rather satisfactory number of computers for the

information -use and -transfer needs of the courses. Despite the short period of the departments function the academic staff achieved connectivity and cooperation with other departments in the same area through the ERASMUS programme, so that students of the department have been and are abroad for a semester stay. Mobility for the academic staff under the conditions of the underdevelopment of recruitment of new colleagues is currently difficult to be achieved. The Committee has been impressed by the didactic load of all academic staff members which exceeds even the didactic load of secondary education teachers! The examination system is based on multiple ways of evaluation including intermediate examinations, homework evaluation, oral examination and final written examination. There is an overall efficacy of the teaching, however the Committee noticed that there are discrepancies between courses regarding the success/failure percentages. It is observed that certain basic courses, such as inorganic chemistry, organic chemistry, physics, food biochemistry, microbiology show a low ratio success /failure, some of them extremely low. Other courses, notably of an applied character such as Food Industry, Primary Production and Seminars of Food Science show a top ratio of successful/participation student approaching 100%! In the intermediate scale there are courses such as Mathematics, Physics show a success ratio of the order of magnitude of 50%.

Success/failure data provided by the Department were analyzed by our Committee are attached as an Annex A to this Report. Three categories were selected of courses:

1. *Critical* under **10 percent** success rate
2. *Very serious* , **11-20 percent** success rate
3. *Serious*, **21-35 percent** success rate.

The Committee recommends that the above rates should be addressed and be corrected when they become a consistent trend.

The Committee was in the unpleasant position to receive complaints from the students regarding the very austere behaviour from a member of the academic staff who uses negative grading when a student makes a mistake in the examination and furthermore he is reluctant to explain to him/her where the false answer was by refusing to show them their written exam test. The Committee strongly suggests, in general, to avoid such practices and suggests to respective faculty member(s) to abstain from implementing such practices in the immediate future.

## **C. Research**

*For each particular matter, please distinguish between under- and post-graduate level, if necessary.*

### **APPROACH**

- What is the Department's policy and main objective in research?
- Has the Department set internal standards for assessing research?

The Department has set international standards for doing and assessing research.

### **IMPLEMENTATION**

- How does the Department promote and support research?
- Quality and adequacy of research infrastructure and support.
- Scientific publications.
- Research projects.
- Research collaborations.

The Department has until now enabled researching through research projects and through cooperation with the local farmers and food SME's. Additionally, though the Diploma Theses of the students that began this academic year 2012/13. The first Theses are going to be ready, thereby the first students will graduate, in the coming September.

Problems of lack of adequate infrastructure and support have been overcome by the enthusiasm and dynamism of the academic staff. The score of all academic staff members in terms of number of publications, citations by others and h-indexes is more than satisfactory and in some cases it is even impressive.

The four (4) members of the Department participate in totally six (6) research projects in the topics of Food Chemistry, Food Microbiology, Food Education and Oenology.

The Department strives for obtaining a research laboratory and also it has submitted a proposal to the ESPA of the Regional Administration for establishing a laboratory for the purpose of studying and developing traditional local food products. Participation in research programs (that request acquiring research equipment) and this requires in cooperating with academic and research partners. Cooperation with food production partners and subject and/or participation in research applications. Our suggestions do not omit the above but include and suggest in taking a serious look in the seafood resources of the immediate adjoin area, such as i.e. fish and shellfish, seaweeds, salt, and Water desalination projects. Also a serious look at sea farming.

### **RESULTS**

- How successfully were the Department's research objectives implemented?
- Scientific publications.
- Research projects.
- Research collaborations.
- Efficacy of research work. Applied results. Patents etc.
- Is the Department's research acknowledged and visible outside the Department?  
Rewards and awards.

See above in implementation.

The Committee has evidence that the Department's research is acknowledged and visible

outside the Department. The Committee was impressed by the awards obtained in educational co-research projects led by student teams which developed food models in the frame of Ecotrophelia European Competition.

#### IMPROVEMENT

- Improvements in research proposed by the Department, if necessary.
- Initiatives in this direction undertaken by the Department .

See above, in Results

### **D. All Other Services**

*For each particular matter, please distinguish between under- and post-graduate level, if necessary.*

#### APPROACH

- How does the Department view the various services provided to the members of the academic community (teaching staff, students).
- Does the Department have a policy to simplify administrative procedures? Are most procedures processed electronically?
- Does the Department have a policy to increase student presence on Campus?

#### IMPLEMENTATION

- Organization and infrastructure of the Department's administration (e.g. secretariat of the Department).
- Form and function of academic services and infrastructure for students (e.g. library, PCs and free internet access, student counseling, athletic- cultural activity etc.).

#### RESULTS

- Are administrative and other services adequate and functional?
- How does the Department view the particular results.

The administrative and other services are rather adequate and functional despite the shortage of administrative personnel. The Department has already received assistance from the Municipality (of Myrinna, the capital of Lemnos) and also from other departments of the Aegean University, in order to overcome the problem. See also our recommendation in section F.

#### IMPROVEMENTS

- Has the Department identified ways and methods to improve the services provided?
- Initiatives undertaken in this direction.

The Department has identified ways and methods to improve the services provided. The Chairman of the Department happens to be the Vice-Rector for the academic affairs of the Aegean University and has also a fruitful cooperation with the Mayor of Lemnos who helps the Department in every aspect.

### **Collaboration with social, cultural and production organizations**

Please, comment on quality, originality and significance of the Department's initiatives.

This area is the strong point of the Department. There are serious relations with the local society both municipality and economic areas. The University campus is accommodated in buildings provided free of charge by the Municipality. Citizens are funding innovation studies, the University in return plays the role of scientific and technical consultant of the Municipality through a Memorandum of Collaboration. In the area of local economy the faculty staff has taken strong leadership to develop local businesses and explore the potential of traditional foodstuffs and the related Food Industry. This is in the frame of joint project "back to the future". As a result cultivation of traditional species is applied and related traditional food businesses have achieved in selling their food products outside of their immediate market. There is always room for growth.

### ***E. Strategic Planning, Perspectives for Improvement and Dealing with Potential Inhibiting Factors***

*For each particular matter, please distinguish between under- and post-graduate level, if necessary.*

The Department has provided an excellent SWOT Analysis including short term and long term strategic planning for its, currently existing, undergraduate level. There are plans for developing a graduate level curricula, as well.

Visible and real inhibiting factors that the young Unit faces, arise from the economical crisis from which the State is suffering, therefore the potential of the State to respond to the crying needs and requirements of the Department, and not only, also of the School and the Institution, is limited. However everybody in the Department, from the Chairman to the young members of the academic staff and also the administrative staff are willing to fight against and they realize that those inhibiting factors constitute challenges and opportunities, in cooperation with Municipality not simply to overcome but also to obtain Development.

### ***F. Final Conclusions and recommendations of the EEC***

*For each particular matter, please distinguish between under- and post-graduate level, if necessary.*

Conclusions and recommendations of the EEC on:

- the development of the Department to this date and its present situation, including explicit comments on good practices and weaknesses identified through the External Evaluation process and recommendations for improvement
- the Department's readiness and capability to change/improve
- the Department's quality assurance.

The overall impression of the Committee is positive. The development of the Department despite all hinders arising from the economical crisis is impressive.

Strong points identified by the Committee include:

- Dedicated (although limited) academic and administrative staff
- Strong support at the Institutional level
- The willingness of the department at this stage to invite an external evaluation and implement all recommendations and possible constructive criticism
- The Department has made a SWOT Analysis which shows that it is aware of the problems and the ways to face them
- The informal Chairman of the Department is the vice Rector for academic affairs
- Strong support from local community
- Innovative administrative practices though web which can be transplanted to other public sector areas
- Overall close teacher/ student body interaction
- Strong interest in developing and re-implementing of farming and bringing to the local, national and international market traditional health promoting (Greek/Aegean Mediterranean diet!) foods coming from indigenous species
- Change of paradigm and improvement in the Farming and the Food Business Environment

Weaknesses identified by the committee are:

- There is shortage in academic and administrative resources
- Nutrition courses are disproportionately underrepresented in the current curriculum
- There are limited laboratory facilities affecting both education and research
- Teaching room are in traditional building that require further renovation and improved heating facilities (peeled ceilings that might contain lead, unfinished beautiful wooden floor)

Recommendations from EEC.

Recommendations to the Department are to be found throughout the text of this Report. Here we focus on the most important points which are messages not only to the Department but also to University and the State:

- Expansion of curriculum and research towards seafood and aquatic products i.e. fish, shellfish, seaweed, sea-salt and desalination projects.
- Implementation of the student advisor institutional
- The proximity of the Department bordering foreign countries places it in an advantageous position to attract funds from the EU in conjunction and cooperation with other departments, i.e. economics , anthropology , sociology , marine science to develop new products, improving the quality of existing products, thus, creating new jobs improving the local food industry and attracting the attention of new tourists.
- Marketing of the Department through the Agricultural attaches in the Greek embassies in foreign countries in order to attract international students that usually are funded for both undergraduate and graduate studies through scholarships from their own countries.
- In the above spirit it is suggested to introduce courses in English.
- The Committee emphasizes and strongly suggests to recruit new faculty at a Full Professor or Associate Professor level with Food Science. Future hiring should be based on clearly understood CV's who show the background and merits of the candidates.

- Back to ancient Greek feeding, with no pesticides, no insecticides , no GMO's, naturally processed foods.
- Continue with analysis of health benefits of locally grown foods such as Mavragani of Lemnos, Afkos (fava of Lemnos), Frizzante wine etc.
- Develop further sister University relations with more countries.

The Members of the Committee

**UNIVERSITY OF THE AEGEAN**  
**DEPARTMENT OF FOOD TECHNOLOGY &**  
**NUTRITION**

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