



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ

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HELLENIC REPUBLIC

H.Q.A.A.

ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ

HELLENIC QUALITY ASSURANCE

ΠΟΙΟΤΗΤΑΣ

AGENCY

ΑΝΩΤΑΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ

FOR HIGHER EDUCATION

EXTERNAL EVALUATION REPORT (final report 05-12-2011)

DEPARTMENT | AGRICULTURAL BIOTECHNOLOGY |

UNIVERSITY | AGRICULTURAL UNIVERSITY OF ATHENS |

Version 2.0

October 2011

BRIEF OVERVIEW

- The site visit was conducted between the 3rd and the 7th of October 2011
- External Evaluation Committee
- 1. Prof. **Christos A. Ouzounis** Principal Investigator CERTH and Professor, CCBR, University of Toronto, Canada (Coordinator)
- 2. Prof. Spyridon Agathos Professor of Biotechnology, University of Louvain, Louvain, Belgium
- **3.** Dr. **Mattheos Koffas** Associate Professor, Center for Biotechnology & Interdisciplinary Studies, Rensselaer Polytechnic Institute (RPI), USA
- **4.** Dr. **Anastasios Papageorgiou** Professor of Structural Biology, Biocity Turku, University of Turku, Turku, Finland
- **5.** Prof. **Athanasios Theologis** Professor Emeritus, Department of Plant & Microbial Biology, University of California Berkeley, USA

PROS AND CONS

- Curriculum
- Teaching-Examination system
- Research
- General

CURRICULUM (PROS)

- Well-planned and broad curriculum to prepare agricultural biotechnologists with a strong background in the fundamentals in plant molecular biology, chemistry and physics
- The biotechnological and agronomical aspects of the undergraduate curriculum have been recently more balanced, even though there is still debate as to the optimal mix between the two
- Attractive features of the curriculum are the **4-month practical exercise** is required as well as a final-year **research dissertation**, which includes the preparation of a final written document and an oral presentation
- The existing curriculum serves the goals of the Department, is of high standards and is executed efficiently
- The curriculum is **coherent** and **focused** on preparing graduates with experimental **skills in laboratory** and **applied biological processes** for agricultural practice, industry and other sectors

CURRICULUM (CONS & IMPROVEMENTS)

- The undergraduate students seem to prefer an earlier exposure to biotechnologyoriented subjects. One possibility might be to give an introductory survey course on **Agricultural Biotechnology** (or **Applied Biotechnology**) in each of the two first years
- The right balance between agricultural and biotechnological subjects especially during the first 6 semesters
- Reduction of the redundancy in the curriculum (less "swelling") and avoidance of overlapping context between undergraduate and postgraduate programs
- Formal mechanism for continuous student academic counseling (academic advisors should be appointed to each student).
- A certain **long-term vision** regarding the curriculum might be required in the near future, given the eminent changes in the educational system nationally

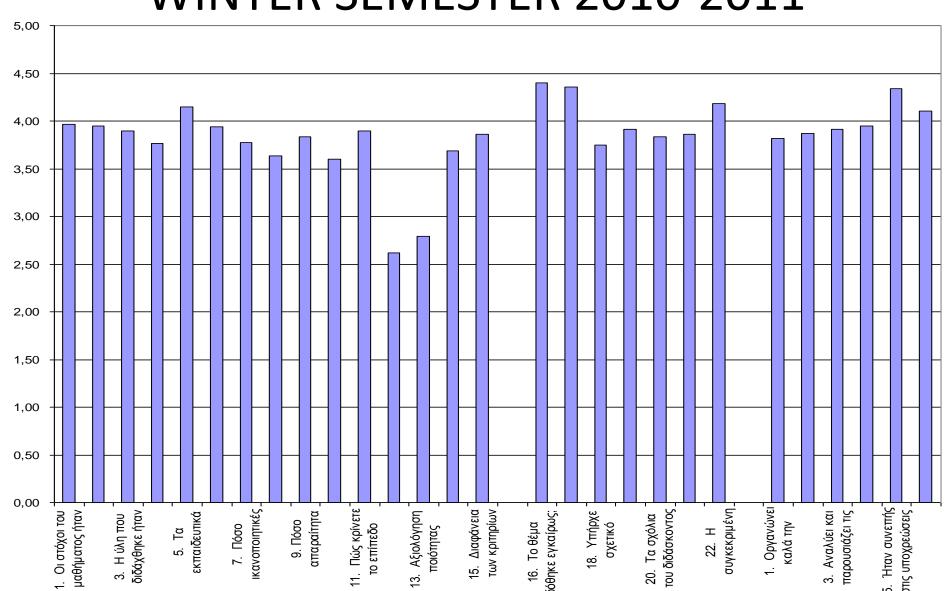
TEACHING-EXAMINATION SYSTEM (PROS)

- Most of the faculty members are **well-trained** and **committed to teaching**, **research**, and **outreach activities**
- The presence of **well-trained** and **experienced laboratory assistants** meets the needs for **teaching** the various subjects, both theoretical and especially laboratory courses
- The faculty members seem to respond to the students' feedback on curriculum issues
- The Committee appreciates the **experimental/laboratory orientation of the Department**
- The **teaching staff** is basically **adequate**
- Faculty and students seem to be getting along very well
- **Resources** such as classrooms, teaching equipment and information technologies are generally **adequate** and are **used effectively** for achieving their teaching goals
- All faculty and other supporting personnel appear **enthusiastic and up-to-date** in pursuing their **educational aims**

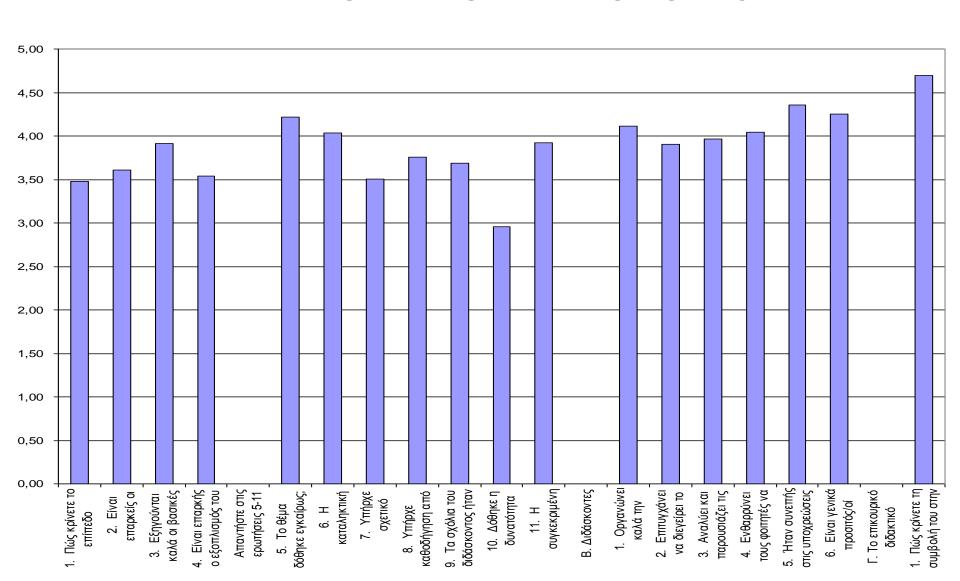
TEACHING-EXAMINATION SYSTEM (PROS) CONTINUED....

- Extensive use of the **internet**, **library resources** and **presentation facilities** is the norm
- The faculty members generally use **high quality textbooks** that are **widely acceptable by the international scientific community**, several of which have been translated into Greek
- Overall, the **teaching process is of high standards**

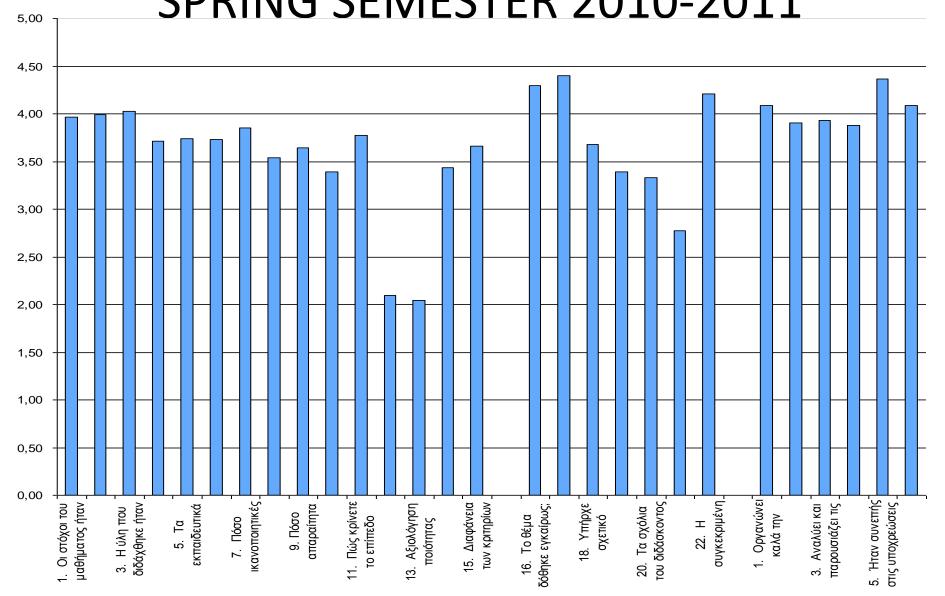
STUDENT EVALUATION – THEORY WINTER SEMESTER 2010-2011



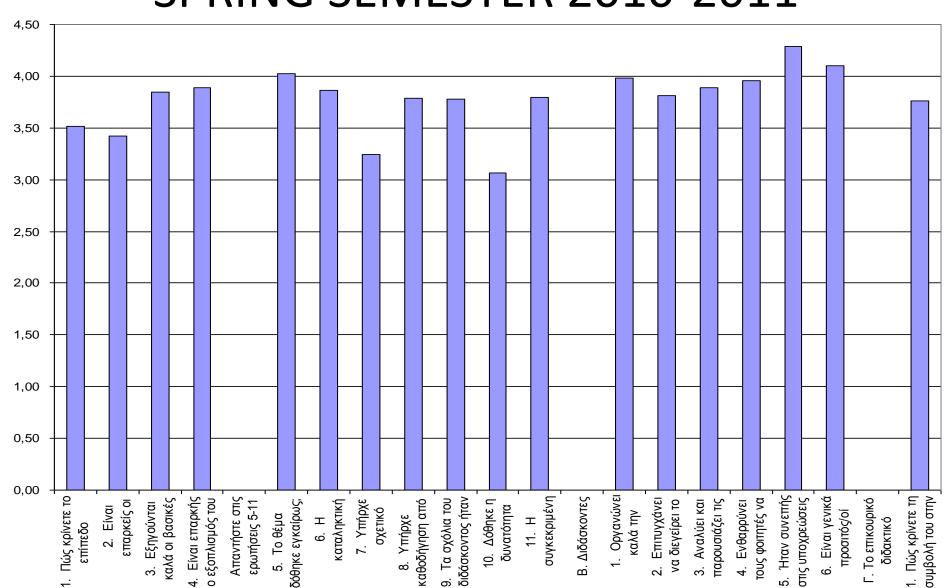
STUDENT EVALUATION – LABORATORY WINTER SEMESTER 2010-2011



STUDENT EVALUATION – THEORY SPRING SEMESTER 2010-2011



STUDENT EVALUATION – LABORATORY SPRING SEMESTER 2010-2011



TEACHING-EXAMINATION SYSTEM (CONS & IMPROVEMENTS)

- Appropriate measures towards **increasing lecture attendance** (quizzes, mid-term evaluation, change of examination system)
- Mostly emphasis is placed on final exams. Each student should be examined on at least two different occasions, for example **one midterm exam** and **one final exam**
- The DAB makes an effort to use textbooks that are up-to-date, although **in a few cases** the notes and other material used were out-of-date
- More extensive use of English in post-graduate teaching could be beneficial for both Greek and international students. This can also be an advantageous element in attracting more foreign students at all levels
- Mobility & exchange programs, primarily because of limited or non-existent international accords between AUA and foreign universities. An effort should be made to encourage mobility further
- Improve (lower) the ratio of students:professors and reduction of teaching load (more time investment in research and grant writing)
- The results of the **students' evaluations** should be publicized and considered for the improvement of teaching efficiency

RESEARCH (PROS)

- Most faculty members have the **ambition to publish high quality peer-review papers**, in the area of their expertise
- The faculty is engaged in multiple collaborations outside the Department
- The publication output is considered at an adequate level, but with ample room for improvement, given the current average level of 0.8 1.8 publications per faculty member and per year
- There are **several funded research projects in progress** that are conducted by about one-half of the faculty members
- There is a good number of collaborations and networking within and outside Greece
- There are **publications** of a few groups with **co-authors** from several other centers and Universities, which shows that a core of **dynamic faculty** members is **pursuing high quality** and **excellence**
- A few faculty members have been able to **excel in their research goals**

RESEARCH (PROS) CONTINUED....

- Several faculty members are internationally known and visible, as judged by invitations to review manuscripts for peer-review journals, membership in journal editorial boards, and organization of conferences
- Research is of **high standards** and **internationally competitive**

RESEARCH (CONS & IMPROVEMENTS)

- **Regular Departmental meetings** annual seminar series to be attended by the faculty and students
- Focused research policy that can optimize the use of resources and the international presence of the Department in a few, key areas.
- The DAB might consider **reward mechanisms** for laboratory assistants, MSc and PhD students (scholarship funds and/or funding research activities)

GENERAL (PROS)

- In general, infrastructures are of high standard while the location and structure of the AUA is quite unique and should be clearly recognized as an asset
- Some faculty members are involved in **culture** and **outreach initiatives**
- The University's Museum and Historical Archives are remarkable resources.
- The publication of the quarterly **magazine "Triptolemos"** constitutes a valuable vehicle for maintaining and expanding **outreach to society**, including the Department's and AUA's alumni
- The **infrastructure** and **location of campus** should be appreciated as a **value-added asset** and **better promoted for outreach** and other activities

GENERAL (CONS & IMPROVEMENTS)

- **Tighter coordination** between faculty members
- Tighter connection to industry/market demands
- Secure **individual office/lab space** for all faculty members (equal treatment policy)
- Increase budget/resource allocation for maintenance of core facility/infrastructure
- The Department should appoint a **3-member committee to evaluate every two years the content of the various courses** to ensure that all of them are updated and remain current with the scientific advancements.
- The Department should consider establishing a **4-member advisory committee** to formulate its long-term goals
- The Department should enhance the **safety of all laboratory spaces**. **Ventilation** should be greatly improved as well as **procedures for the disposal** of the chemicals used. The disposal of chemicals in the sinks should not be allowed
- The Department should allow the **post-graduate students to rotate** in other laboratories

SWOT ANALYSIS

