



ABDULLAH GÜL
ÜNİVERSİTESİ

FACULTY OF LIFE & NATURAL SCIENCES (L&NS)
INTERNAL EVALUATION REPORT 2022

Sümer Campüs, 38080
KOCASINAN /KAYSERİ
Ocak, 2023

Contents

GENERAL INFORMATION	4
1. Contact Info:	6
A.1. Leadership and Quality	7
A.1.2. Leadership	9
A.1.3. Institutional Transformation Capacity	10
A.1.4. Internal Quality Assurance Mechanisms.....	9
A.1.5. Public Disclosure And Accountability	11
A.2.1. Mission, Vision ve Policies.....	12
A.2.2. Strategic Goals and Objectives	13
A.2.3. Performance Management	13
A.3. Administrative System	14
A.3.1. Information Management Systems	14
A.3.2. Human Resources Management.....	16
A.3.3. Financial Management.....	20
A.3.4. Process Management.....	18
A.4. Stakeholder Participation	19
A.4.1 Internal and External Stakeholder Sngagement	19
A.4.2 Student Feedback	19
A.4.3 Alumni Relations Management	19
A.5. Stakeholder Participation	19
A.5.1 Management of Internationalization Processes.....	19
A.5.2 Internationalization resources	19

A.5.3 Internationalization Performance	20
B.1. Design and Approval of Programs	20
B.1.1. Design and Approval of Programs	20
B.1.2. Course distribution balance of the program	22
B.1.3. Compatibility of Course Outcomes with Program Outcomes.....	22
B.1.4. Course Design Based on Student Workload	23
B.1.5. Monitoring and Updating Programs.....	23
B.1.6. Management of Education and Training Processes	23
B.2. Execution of the Programs	24
B.2.1. Teaching Methods and Techniques	24
B.2.2. Measurement and Evaluation	24
B.2.3. Student Admission and Recognition and Crediting of Prior Learning	25
B.2.4. The Certification of Qualifications and the Diploma.....	26
B.3 Learning Sources and Academic Support Services.....	26
B.3.1. Learning Environment and Resources	26
B.3.2. Academic Support Services	30
B.3.4. Disadvantaged Groups	30
B.3.5. Social, Cultural and Sportive Activities	30
B.4. Teaching Staff	28
B.4.1. Appointment, Promotion and Assignment Criteria.....	28
B.4.2. Teaching Competencies and Development	28
B.5. Learning Resources	29
C.1. Management of Research Processes and Research Resources.....	30
C.1.1. Management of Research Processes	30
C.1.2 Internal and External Sources	30

C.1.3. PhD Programs and Post-doc Facilities	31
C.2. Management of Research Processes and Research Resources.....	31
C.2.1. Competence and Development of the Research.....	31
C.2.2. National and International Joint Programs and Joint Research Units	32
C.3. Research Performance	32
C.3.1. Performance Evaluation of Faculty Members of Bioengineering Department.....	32
C.3.2. Performance Evaluation of Faculty Members of Bioengineering Department.....	33
D.1. Management of Social Contribution Processes and Social Contribution Resources	34
D.1.1. Management of Social Contribution Processes	34
D.2.1. Management of Social Contribution Processes	34
D.1.2. Resources	39
CONCLUSION and EVALUATION	41
1. Quality Assurance System:	41
3. Research and Development:.....	42
Strengths	42

GENERAL INFORMATION

1. Contact Info:

Dean: Prof. Dr. Alaattin ŐEN

Adress: Abdullah Göl Üniversitesi, Yařam ve Doęa Bilimleri Faköltesi, Barboros Mah.,
SümerKampüsü, Erkilet Blv., 38080 Kocasinan/Kayseri

Phone: 0 352 224 88 00 Ext 7306

Email: sena@agu.edu.tr

Vice Dean: Assoc. Prof. Dr. İsmail Alper İŐOęLU

Address: Abdullah Göl Üniversitesi, Yařam ve Doęa Bilimleri Faköltesi, Barboros Mh.,
SümerKampüsü, Erkilet Blv., 38080 Kocasinan/Kayseri

Phone: 0 352 224 88 00 Ext 7296

Email: alper.isoglu@agu.edu.tr

A. LEADERSHIP, ADMINISTRATION and QUALITY

A.1. Leadership and Quality

A.1.1. Administrative Model and Structure

1

2

3

4

5

Comments

With the approval of the Council of Higher Education dated 08/10/2014 and numbered 75850160- 101.03.01/59351, the Faculty of Engineering and Natural Sciences of Abdullah Gul University was closed and it was decided to establish the Faculty of Life and Natural Sciences at the meeting of the Higher Education Executive Board dated 11/01/2014. At the same meeting, it was consented to open the Department of Bioinformatics, Department of Bioengineering, Department of Molecular Biology and Genetics, and Department of Neuroscience at the Faculty of Life and Natural Sciences.

L&NS has a management structure consisting of the Dean, a Vice Dean and Faculty Board, Faculty Administrative Board, Department Heads and Faculty Executive Secretary following the scope of Academic Organization Regulation in Universities. This model adopts an innovative, contemporary, transparent, accountable, and socially sensitive approach.

Within the scope of the Internal Control and Risk Management System, the administrative and academic structure of the Faculty has been established. It is structured as Personnel Affairs, Financial Affairs, Registrar's Office, Student Affairs. The Faculty Executive Secretary is responsible to the Dean for the work of the administrative organisation (1)

Duties, authorities and responsibilities of the staff are defined based on the Higher Education Law Item 2547. The staff's duties, authorities, and responsibilities are systematically determined for effective internal control. Job descriptions have been published on the L&NS website, and all actions are open to the stakeholders.

(2)

The commissions formed under the Faculty Administrative Board support the administration. With this organisation, the Faculty is able to fulfil its mission, goals and objectives. (3)

Sensitive tasks and risk are defined within the scope of risk management.(4)

With the Abdullah Gül University Electronic Document Management System, Signature Authorities and Implementation Principles Directive, the areas of

	<p>authority and responsibilities of those in the administrative management level have been determined. (5)</p> <p>Workflow charts reflecting the essential administrative and support processes were created. (6)</p> <p>All units and staff of the L&NS fulfil their duties and responsibilities within the framework of legal regulations in line with the mission, vision and strategic goals of the University, within the scope of the job descriptions specified in the internal control system. (7)</p> <p>Faculty Quality Assurance Committee. (8)</p> <p>Faculty Executive Board Decisions (9)</p> <p>Activity Reports (10)</p> <p>Program Budget Performance Assessment Reports (11)</p>
<p>Evidence</p>	<p>http://www.agu.edu.tr/userfiles//1yasam/idari_te%C5%9Fkilat_%C5%9Femas%C4%B1.pdf (1)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/akademik_te%C5%9Fkilat_%C5%9Femas%C4%B1.pdf (1)</p> <p>http://flns.agu.edu.tr/gorev_tanimlari (2)</p> <p>http://flns.agu.edu.tr/komisyon (3)</p> <p>http://flns.agu.edu.tr/hassasgorevler (4)</p> <p>http://www.agu.edu.tr/userfiles//Yaz%C4%B1%20%C4%B0%C5%9Fleri/ebysonergesi.pdf (5)</p> <p>http://flns.agu.edu.tr/isakisi (6)</p> <p>http://flns.agu.edu.tr/yonetmelikler (7)</p> <p>http://flns.agu.edu.tr/yonergeler (7)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Kalite_Komisyon_%C3%9Cyeler.pdf (8)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/06_01.2022%20akt.pdf (9)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Kalite_Kurul_Toplant%C4%B1_2022.pdf (9)</p> <p>http://flns.agu.edu.tr/fakulte-yonetim-kurulu (9)</p>

	http://flns.agu.edu.tr/fakulte-kurulu (9) http://flns.agu.edu.tr/faaliyet-raporu (10) http://flns.agu.edu.tr/deger-rapor (11)				
A.1.2. Leadership	1	2	3	4	5
Comments	<p>The task is carried out according to the Quality Assurance and Administration Policies determined by the AGU. Leadership processes and internalization of the quality assurance culture are constantly evaluated. (one)</p> <p>The mentality of leadership involving coordination culture has been established in each unit. In addition to strategies in line with the values and goals of the institution, leaders also manage power sharing, relationships, time, corporate motivation, and stress effectively and sustainably.2)</p> <p>An effective communication network has been established between the academic and administrative units with the administration. (3)</p> <p>Academic Board Meeting is held in the first week of every month with the participation of our internal stakeholders, our academic staff.(4)</p> <p>To measure the suppliers' satisfaction, it is required to fill out a form to evaluate the unit. (5)</p> <p>Evaluation Reports (6)</p>				
Evidence	<p>http://kalite.agu.edu.tr/kal-guven-sis (1)</p> <p>http://www.agu.edu.tr/userfiles/bilgisayar/Computer%20Engineering%20Department/KAL%C4%B0TE/2020.12.01_kalite%20g%C3%BCvence%20politikas%C4%B1.pdf (1)</p> <p>http://flns.agu.edu.tr/komisyon (2)</p> <p>http://www.agu.edu.tr/userfiles//iyasam/Fak%C3%BClte_Y%C3%B6netim_Kurulu_%C3%9Cyeleri_v.pdf (2)</p> <p>http://www.agu.edu.tr/userfiles//iyasam/Fak%C3%BClte_Kurul_%C3%9Cyeleri_ve_G%C3%B6revle.pdf (2)</p> <p>http://cd.agu.edu.tr/index.php/s/XQh1fmD8U0BUc4n (3)</p> <p>http://cd.agu.edu.tr/index.php/s/EysTeJws5GEezAj (3)</p>				

	http://www.agu.edu.tr/userfiles//1yasam/06_01.2022%20akt.pdf (4) http://www.agu.edu.tr/userfiles//1yasam/09_05.2022%20akt.pdf (4) http://cd.agu.edu.tr/index.php/s/A6f9GsIfWIFcSjB (5) http://flns.agu.edu.tr/faaliyet-raporu (6) http://flns.agu.edu.tr/deger-rapor (6)				
A.1.3. Institutional Transformation Capacity	1	2	3	4	5
Comments	<p>It has agile management competence that ensures the institution is ready for the future by considering the changes in the higher education ecosystem, global trends, national targets, and stakeholder expectations. Approaches involving adaptive management, benchmarking, and innovative management are applied to transform the institution parallel with the purpose, mission, and targets for adaptation to the future and strengthen corporate originality.</p> <p>In the meetings held with the institution's senior management, the needs for development and change were discussed.</p>				
Evidence					
A.1.4. Internal Quality Assurance Mechanisms	1	2	3	4	5
Comments	<p>Within AGU, Quality Assurance System and Education, Research, Community Contribution SWOT analysis have been prepared and published on the website (1)</p> <p>Within the scope of the operation of the cycles, the performance indicators specified in the strategic plan of AGU are monitored in the Faculty of Life and Natural Sciences for 3-month periods. They are also monitored annually following the end of each year. (2)</p> <p>In addition, quality commissions were established in both Faculty and departments to internalise quality processes by all academic and non-academic staff. (3)</p> <p>Also, some faculty members were appointed to the University's quality subcommittees. The administrative board disseminated information to the Faculty. (4)</p> <p>In order to ensure the participation of the quality commission members within our Faculty and departments in the SWOT analysis that must be followed while the</p>				

	<p>activities are carried out, meetings that will spread the culture are organised by the higher commissions, and they provide feedback to the units for the development of the maturation level. The academic and administrative staff of L&NA are actively involved in establishing and developing a quality assurance system. (5)</p> <p>As with the PDCA cycles, which actions, processes, and mechanisms will be activated on the basis of the calendar year are planned, and the flow charts are determined. (6)</p> <p>Responsibilities and authorities are defined, and the implemented applications are evaluated. (7)</p> <p>Other quality cycles, which are not designed on a calendar year basis, are indicated with evidence that they include all layers, and the executed practices are evaluated. (8)</p> <p>There is an institutional quality assurance guide that is accessible and updated document with policy details. (9)</p>
<p>Evidence</p>	<p>http://kalite.agu.edu.tr/ (1)</p> <p>http://kalite.agu.edu.tr/kal-guven-sis (1)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Program_Butce_Performans_Gosterg.pdf (2)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/2022_Y%C4%B11%C4%B1_Nisan_May%C4%B1s_Haziran.pdf (2)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/2022_Y%C4%B11%C4%B1_Temmuz_A%C4%9Fustos_Eyl%C3%BCl.pdf (2)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Kalite_Komisy%C3%9Cyeler.pdf (3)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Biyom%C3%BChendislik_B%C3%BCl%C3%BCm%C3%BC.pdf (4)</p> <p>http://www.agu.edu.tr/userfiles//yasam_doga_depo/MBG_KOMISYONLAR.pdf (4)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Kalite_Kurul_Toplant%C4%B1_2022.pdf (5)</p>

	http://flns.agu.edu.tr/isakisi (6) http://flns.agu.edu.tr/gorev_tanimlari (7) http://flns.agu.edu.tr/komisyon (7) http://www.agu.edu.tr/userfiles//1yasam/06_01.2022%20akt.pdf (7) https://mbg.agu.edu.tr/ders-izlenceleri (8) https://bioeng.agu.edu.tr/ders_izlenceleri (8) http://kalite.agu.edu.tr/kalite-el-kitabi (9)					
A.1.5. Public Disclosure And Accountability	1	2	3	4	5	
Comments	<p>L&NS and affiliated departments present the information about all the activities carried out on the web pages to the public's attention in an up-to-date, accurate and transparent manner. In addition, information about activities and developments are announced on the main web pages of the AGU. These pages can be accessed quickly. (1)</p> <p>Non-confidential Faculty Executive Board Decisions, Faculty Board Decisions, and Faculty Academic Board Decisions are shared on our Faculty website. (2)</p> <p>Detailed information and data about the undergraduate programs of L&NS are shared with the public, especially with university candidate students and their families, within the scope of promotional activities. In this context, students are hosted at the University, our laboratories are introduced, high schools are visited, and information is shared. L&NS administration carries out its activities accountable to its internal inspector, YÖK and Court of Accounts. The Faculty Budget is used transparently with a practical, economic and efficient expenditure policy in line with the needs determined by the academic faculty board under the responsibility of the expense officer (3)</p> <p>The strategic plan covering the years 2018-2022, which includes the goals, objectives and methods of achieving them, and a future-oriented perspective, guide the prioritisation of resource allocation and accountability. In this direction, it has been determined whether the targets envisaged to be achieved have been realised, and the criteria to be accounted for are evaluated. (4)</p> <p>Faculty employees are aware of the relevant processes by personally participating in the procurement processes by being the members of the various commissions such as tender, inspection, acceptance and control commissions (5)</p>					

	<p>L&NS prepares a "Faculty Report" covering all the activities of the Faculty and affiliated departments (such as financial, education-training, administrative etc.) every year. This report, which is prepared in great detail, includes the projects, publications, financial expenses, committee memberships of the faculties; numerical data of students; numerical data of academic and administrative personnel as well as community service activities. The annual report prepared at the end of the year is presented transparently to the public online. A transparent policy is followed regarding the up-to-dateness accuracy and reliability of the information given to the public with the internal control assurance statement. (6)</p>					
<p>Evidence</p>	<p>http://flns.agu.edu.tr/ (1)</p> <p>http://www.agu.edu.tr/ (1)</p> <p>http://flns.agu.edu.tr/fakulte-yonetim-kurulu (3)</p> <p>http://flns.agu.edu.tr/fakulte-kurulu (3)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/06_01.2022%20akt.pdf (3)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/09_05.2022%20akt.pdf (3)</p> <p>http://www.agu.edu.tr/userfiles//95_sayfa.pdf (4)</p> <p>http://flns.agu.edu.tr/stratejikplan (4)</p> <p>http://flns.agu.edu.tr/komisyon (5)</p> <p>http://flns.agu.edu.tr/faaliyet-raporu (6)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Program_Butce_Performans_Gosterg.pdf (6)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/2022_Y%C4%B1l%C4%B1_Nisan_May%C4%B1s_Haziran.pdf (6)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/2022_Y%C4%B1l%C4%B1_Temmuz_A%C4%9Fustos_Eyl%C3%BCl.pdf (6)</p>					
<p>A.2. Mission and Strategic Objectives</p>						
<p>A.2.1. Mission, Vision ve Policies</p>	<table border="1"> <tr> <td data-bbox="999 1854 1086 1944">1</td> <td data-bbox="1086 1854 1174 1944">2</td> <td data-bbox="1174 1854 1262 1944">3</td> <td data-bbox="1262 1854 1350 1944">4</td> <td data-bbox="1350 1854 1449 1944">5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
<p>Comments</p>	<p>Mission and vision are well-defined statements that are known and shared by employees. It is specific to the faculty and a guide to creating a sustainable future. In line with the mission and vision of our university, the vision and mission of our faculties and departments have been established. (1)</p>					

	<p>The institution has a quality assurance policy that has been prepared by taking the opinions of the stakeholders. It is known and shared by the employees. The policy document is simple, concrete, and realistic, outlining the sustainable quality assurance system. The management style, structuring, basic mechanisms, and central setup of the quality assurance policy are explained.</p> <p>Likewise, there are education and training (including distance education), research and development, social contribution, management, and internationalization policies basing quality assurance policy. (2) Mission and vision are well-defined statements that are known and shared by employees. It is specific to the faculty and a guide to creating a sustainable future.</p>				
Evidence	<p>http://www.agu.edu.tr/vizyonmisyona (1)</p> <p>http://flns.agu.edu.tr/vizyon-misyona (1)</p> <p>https://mbg.agu.edu.tr/vizyon-ve-misyona (1)</p> <p>https://bioeng.agu.edu.tr/misyona-ve-vizyona (1)</p> <p>http://kalite.agu.edu.tr/kalite_pol (2)</p>				
A.2.2. Strategic Goals and Objectives	1	2	3	4	5
Comments	<p>Strategic Plan culture and tradition have been established. The strategic plan covers the current period, short/medium long-term objectives, targets, sub-goals, actions, timing, prioritization, responsibilities, and financial resources. It was prepared by taking the opinions of all stakeholders (particularly strategic stakeholders). While preparing the current strategic plan, a detailed evaluation of the previous one was made and used. Annual occurrence is followed and discussed in the relevant committees, and necessary precautions are taken.</p>				
Evidence	<p>http://www.agu.edu.tr/userfiles//95_sayfa.pdf</p> <p>http://flns.agu.edu.tr/stratejikplan</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Program_Butce_Performans_Gosterg.pdf</p> <p>http://www.agu.edu.tr/userfiles//1yasam/2022_Y%C4%B1l%C4%B1_Nisan_May%C4%B1s_Haziran.pdf</p> <p>http://www.agu.edu.tr/userfiles//1yasam/2022_Y%C4%B1l%C4%B1_Temmuz_A%C4%9Fustos_Eyl%C3%BCl.pdf</p> <p>http://flns.agu.edu.tr/faaliyet-raporu</p>				
A.2.3. Performance Management	1	2	3	4	5

Comments	<p>Performance management systems in the institution are handled with a holistic approach. These systems help the institution to continuously improve and prepare for the future in parallel with its strategic goals. Supported by information systems, performance management is ensured to be accurate and reliable. Performance management, which reflects the strategic perspective of the institution, is carried out with a process-oriented approach and stakeholder participation.</p> <p>Unit performance indicators covering all key activities were defined and posted.</p>						
Evidence	<p>http://flns.agu.edu.tr/isakisi</p> <p>http://flns.agu.edu.tr/gorev_tanimlari</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Biyom%C3%BChendislik_B%C3%B6l%C3%BCm%C3%BC.pdf</p> <p>http://www.agu.edu.tr/userfiles//yasam_doga_depo/MBG_KOMISYONLAR.pdf</p> <p>http://flns.agu.edu.tr/komisyon</p> <p>http://flns.agu.edu.tr/disiplinrehberi</p> <p>http://www.agu.edu.tr/userfiles//95_sayfa.pdf</p> <p>http://flns.agu.edu.tr/stratejikplan</p> <p>http://www.agu.edu.tr/userfiles//1yasam/Program_Butce_Performans_Gosterg.pdf</p> <p>http://www.agu.edu.tr/userfiles//1yasam/2022_Y%C4%B1l%C4%B1_Nisan_May%C4%B1s_Haziran.pdf</p> <p>http://www.agu.edu.tr/userfiles//1yasam/2022_Y%C4%B1l%C4%B1_Temmuz_A%C4%9Fustos_Eyl%C3%BCl.pdf</p> <p>http://flns.agu.edu.tr/faaliyet-raporu</p>						
A.3. Administrative System							
A.3.1. Information Management Systems			1	2	3	4	5
Comments	<p>The Information Technologies Department carries out information Management Systems at AGU under the President, the Vice President and the relevant commission. IT department buy additional expert services from commercial companies when necessary.</p> <p>Systems are protected with highly secure measures. Only authorised personnel (academic/administrative) can access and make data entries or queries according to their authority. The confidentiality and security of data are ensured.</p> <p>Additional transactional requests are performed only on approval of the Dean by giving authorisation within the content of the transaction to be made. Transactions are recorded in the system by keeping secure 'log' files. For education and training</p>						

activities at AGU, a system called UIS (University Information System), which contains the students' demographic information, the courses and grades they have taken, their success status, applications, petitions etc., is used. Faculty members give their lecture notes through this system, and academic advisors can follow up on information about their students through this system. (1)

Two teaching management systems are used, namely Schoology in the Language School and Canvas in undergraduate and graduate programs, to execute education and training activities. With these systems, our instructors share all the materials related to the course with the students and enable the students to see the status of the course and communicate with the relevant lecturer. (2)

Academic Data Management System named AVESIS is used for R&D activities. In AVESIS, data (publications, citations, projects, patents, awards, etc.) related to the scientific studies of all academic staff at AGU are collected, and statistics and reports related to all these studies can be obtained. Faculty members frequently enter data into this system, and all of these data are updated at least once a year through annual evaluation and academic incentive practices. (3)

The project management system called BAPSIS manages all operations related to research projects supported through BAP at AGU. In this system, all information and processes related to the project can be seen and followed. In addition to the systems mentioned above, faculty members have to enter their personal and research information into YOKSIS, which is made simple by transferring directly to YOKSIS with a module created in BAPSIS. Data of faculty members and their scientific studies can be followed more effectively through this system. (4)

Some of our announcements are uploaded on the University's web page, and a system called AGU WEB CMS is used for this purpose. Some of the reports are also advertised on the Faculty web page. (5)

KBS: Public Accounts Information System provides an electronic communication environment between the spending office and accounting office, integrating financial transactions' expenditure and accounting procedures in a single automation system.

Appliance Record Control Management System: It is a system used to carry out the institution's transfer and counting of all appliances. (6)

Evidence

<https://uis.agu.edu.tr/buis/Login.aspx> (1)

<https://agu.schoology.com/login?&school=49890877> (2)

<https://canvas.agu.edu.tr/login/canvas> (2)

https://avesis.agu.edu.tr/ (3) https://bapsis.agu.edu.tr/Default2.aspx (4) http://flns.agu.edu.tr/ (5) https://www.kbs.gov.tr/gen/login.htm (6) https://mys.hmb.gov.tr/login https://muhasebat.hmb.gov.tr/kbs-uygulamalar https://ebys.agu.edu.tr/enVision/Login.aspx http://ekders.agu.edu.tr/ http://pbs.agu.edu.tr/login/auth

A.3.2. Human Resources Management	1	2	3	4	5
--	----------	----------	----------	----------	----------

Comments	<p>Human resources at L&NS consist of students, academic and administrative staff. (1)</p> <p>In line with the mission and Vision of the AGU, our faculty tries to recruit qualified human resources to ensure the sustainability of these resources.</p> <p>Appointment and promotion of academics are carried out within the framework of objective criteria approved by the University Senate. (2)</p> <p>Personnel assignments are managed according to the workload of the staff, and the responsibilities of task authority are determined by considering the skill of the personnel and their performance. Non- academic staff are experienced and have adequate training. (3)</p> <p>For the development of academic human resources and postgraduate education, academicians are supported to participate in congresses, symposiums, and seminars in their fields and to organise similar events hosted by the L&NS. (4)</p> <p>Training is given for the purchased devices for the academic staff to use the special devices effectively and prevent damage. The company's payments are not paid before the training of the purchased device is completed. (5)</p> <p>Unit organisation charts were created within the scope of the internal control system of L&NS, and all administrative tasks were defined in the management structure. (6)</p> <p>Academic and non-academic staff who are successful in their studies are rewarded with a certificate of appreciation and/or a plate. (7)</p> <p>At L&NS, practices are carried out following defined workflow processes</p>
-----------------	---

	according to human resources management. (7)				
Evidence	http://cd.agu.edu.tr/index.php/s/hj300RlzeyF7t6R (1) http://www.agu.edu.tr/userfiles//Yaz%C4%B1%20%C4%B0%C5%9Fleri/2021senato31.pdf (2) https://personel-tr.agu.edu.tr/uploads/Y%C3%B6nergeleri/AG%C3%9C%20AKADEM%C4%B0K%20Y%C3%9CKSELT%C4%B0LME%20VE%20ATANMA%20Y%C3%9CNERGES%C4%B0.pdf (2) http://cd.agu.edu.tr/index.php/s/d46uNpTOE8OiIpx (3) http://cd.agu.edu.tr/index.php/s/MCJ57BBFbXBiYAF (4) http://cd.agu.edu.tr/index.php/s/s3295gWH4GiWAxT (5) http://cd.agu.edu.tr/index.php/s/S7JXCzXRBIXtrWl (5) http://cd.agu.edu.tr/index.php/s/T0K4cIRoL6PaLJd (5) http://flns.agu.edu.tr/gorev_tanimlari (6) http://www.agu.edu.tr/userfiles//1yasam/idari_tec%C5%9Fkilat_tec%C5%9Femas%C4%B1.pdf (6) http://www.agu.edu.tr/userfiles//1yasam/akademik_tec%C5%9Fkilat_tec%C5%9Femas%C4%B1.pdf (6) http://cd.agu.edu.tr/index.php/s/69LfHgqwbCYdSgV (7) http://flns.agu.edu.tr/isakisi (8)				
A.3.3. Financial Management	1	2	3	4	5
Comments	<p>While using financial resources, the Faculty of Life and Natural Sciences complies with Law No. 5018 on Public Financial Management and Control and the laws governing the financial legislation such as the Law on Public Procurement No. 4734, and accountability and financial transparency are always kept at the forefront.</p> <p>According to Article 11 of the Public Financial Management and Control Law No. 5018; "Top managers are responsible for the preparation and implementation of the strategic plans and budgets of their administrations following the development plan, annual programs, the strategic plan and performance targets of the AGU and service requirements, ensuring the effective, economical and efficient acquisition and use of the resources under their responsibility, and the prevention of loss and misuse. To the Minister for supervising and monitoring the functioning of the financial management and control system and fulfilling the duties and</p>				

	<p>responsibilities specified in the laws and presidential decrees; In local administrations, they are responsible to their assemblies." According to Article 8 of Law No. 5018, "Those who are in charge and authorised in the acquisition and use of all kinds of public resources are responsible for obtaining, using, accounting, reporting and taking necessary measures to prevent the misuse of resources in an effective, economical, efficient and legal manner, and must be accountable to the authorities." is stated. The Dean, who is the faculty spending authority, fulfils the requirements of this responsibility. (1)</p> <p>Financial processes have been defined and workflows has been created. (2)</p> <p>The needs determined by paying attention to the quality and suitability of goods and services are first discussed in the Faculty Academic Board. After the Board evaluates the requested needs and determines the necessity and appropriateness of the condition, the needs of the departments are combined when necessary, and the resources are used effectively and efficiently by making bulk purchases (3)</p> <p>The appropriations transferred to the budget of L&NS with the decision of the University Executive Board are mainly made for economical and efficient expenditures by putting out to tender. (4)</p> <p>The financial status is reported annually and posted on our website. (5)</p>					
<p>Evidence</p>	<p>http://cd.agu.edu.tr/index.php/s/ex8izICHTz6PUoi (1)</p> <p>http://cd.agu.edu.tr/index.php/s/3mCNY9EKhuxMgrw (1)</p> <p>http://flns.agu.edu.tr/isakisi (2)</p> <p>http://www.agu.edu.tr/userfiles//1yasam/09_05.2022%20akt.pdf (3)</p> <p>http://cd.agu.edu.tr/index.php/s/SnmMLWh5dVgDHOo (4)</p> <p>http://flns.agu.edu.tr/faaliyet-raporu (5)</p>					
<p>A.3.4. Process Management</p>	<table border="1"> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
<p>Comments</p>	<p>The processes and sub-processes of all activities are defined. Responsible persons in the processes, workflow and management are defined and internalized in the unit.</p>					

Evidence	https://api.yokak.gov.tr/Storage/agu/2020/ProofFiles/Annex_E.74_2017-2020%20Faculty%20of%20Life%20and%20Natural%20Science%20Board%20Decisions.pdf http://flns.agu.edu.tr/disiplinrehberi http://flns.agu.edu.tr/isakisi http://flns.agu.edu.tr/hassasgorevler http://www.agu.edu.tr/userfiles//1yasam/Biyom%C3%BChendislik_B%C3%B6l%C3%BCm%C3%BC.pdf http://www.agu.edu.tr/userfiles//yasam_doga_depo/MBG_KOMISYONLAR.pdf http://www.agu.edu.tr/userfiles//Yaz%C4%B1%20%C4%B0%C5%9Fleri/ebysy_onergesi.pdf				
A.4. Stakeholder Participation					
A.4.1 Internal and External Stakeholder Sngagement	1	2	3	4	5
Comments					
Evidenec					
A.4.2 Student Feedback	1	2	3	4	5
A.4.3 Alumni Relations Management	1	2	3	4	5
Comments					
Evidenec					
A.5. Stakeholder Participation					
A.5.1 Management of Internationalization Processes	1	2	3	4	5
Comments					
Evidenec					
A.5.2 Internationalization resources	1	2	3	4	5

Comments					
Evidenec					
A.5.3 Internationalization Performance	1	2	3	4	5
Comments					
Evidenec					

B. EDUCATION					
B.1. Design and Approval of Programs					
B.1.1. Design and Approval of Programs	1	2	3	4	5

Comments

Undergraduate education in department of bioengineering started in 2018 fall semester with the approval of YÖK. Education program was prepared in line with the processes defined in our university, adhering to the principles and format determined by YÖK.

During the evaluation phase, the program design was evaluated in a wide range such as; its similarities and differences with other programs at the university, sustainability of the program, targeted student profile, department's focus areas, targeted learning outcomes, and the post-graduate employment of future graduates. After the design of the program was evaluated in all dimensions, it was proposed to the university senate. After the program had been approved by Senate, education and training began. The proposal to open a new program in our faculty is planned to be carried out within the scope of the process followed in the proposal to open the previous departments. The program objectives and outputs of the department of bioengineering and the TYYÇ compatibility of the program are defined by considering the comprehensive field survey (National and international field scanning, YÖK Turkey Higher Education Qualifications Framework (TYYÇ) undergraduate education qualifications) and Bologna process undergraduate qualifications. The document containing the TYYÇ compliance of the department is available both on the department website and on the quality control system website of our university. In July 2022, the curriculum of the department was updated and approved by the Senate.

The Department of Molecular Biology and Genetics, which is actively continuing its undergraduate education in the Faculty of Life and Natural Sciences at Abdullah Gül University, was opened in 2016 with the approval of Council of Higher Education (CoHE), and the education program was prepared in accordance with the processes defined in our university, adhering to the principles and format determined by Council of Higher Education (CoHE). During the evaluation phase, the program design of the department, its similarities, and differences with other programs at the university, the sustainability of the program, the targeted student profile, the department's focus areas, the targeted learning outcomes, and the post-graduate employment of future graduates were evaluated in a wide range. After the design of the program was evaluated with all its dimensions, it was presented to the university senate. After the approval of the senate, education and training have begun. The proposal to open a new program in our faculty is planned to be carried out within the scope of the process followed in the proposal to open the previous

	<p>departments. The objectives and outcomes of Molecular Biology and Genetics Department and compatibility of the program to National Qualifications Framework have been defined by considering the comprehensive field survey (national and international field scanning, National Qualifications Framework for Higher Education in Turkey (NQF-HETR) and qualifications of Bologna Process. The document containing the (NQF-HETR) compliance of the department is available both on the department website and on the quality control system website of our university.</p>					
Evidence	<p>https://bioeng.agu.edu.tr/kalite</p> <p>https://bioeng.agu.edu.tr/tyyc</p> <p>http://kalite.agu.edu.tr/lisans_qual</p> <p>https://mbg.agu.edu.tr/bologna</p> <p>https://mbg.agu.edu.tr/uploads/formlar/MBG_Undergrad_TR.pdf</p> <p>https://mbg.agu.edu.tr/kalitehttps://bioeng.agu.edu.tr/kalite</p>					
B.1.2. Course distribution balance of the program	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
Comments	<p>The principles, rules and methods regarding the course distribution of the program are defined. The curriculum structure defines the balance of compulsory-elective courses, field, non-field courses, and provides cultural depth and the opportunity to get to know different disciplines. The number of lessons and weekly class hours are arranged in such a way that the student can spare time for non-academic activities. The suitability and operability of the course information packages developed within this scope are monitored and related improvements are made.</p>					
Evidence	<p>https://bioeng.agu.edu.tr/ders-plani-lisans</p> <p>Biyomühendislik bölümü program bilgileri</p> <p>Biyomühendislik bölümü ders müfredatı</p> <p>Biyomühendislik bölümü ders içerikleri</p> <p>https://mbg.agu.edu.tr/mbg-program-bilgileri</p> <p>https://mbg.agu.edu.tr/muefredat</p> <p>https://mbg.agu.edu.tr/ders-katalog</p>					
B.1.3. Compatibility of Course Outcomes with Program	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		

Outcomes						
Comments	Tables indicating the course codes, syllabuses, lecture days and classrooms are shared by UIS AGU. In order to ensure the quality control system, the matrices in which the course outcomes and program outcomes are matched in the section, as in all departments, are available on our department website.					
Evidence	https://bioeng.agu.edu.tr/ders_izlenceleri https://bioeng.agu.edu.tr/kalite https://mbg.agu.edu.tr/kalite https://mbg.agu.edu.tr/ders-izlenceleri					
B.1.4. Course Design Based on Student Workload		1	2	3	4	5
Comments	<p>The ECTS value of all courses is shared on the website and verified by student workload tracking. There are practical learning opportunities for internships and professions, and sufficient student workload and credits are considered. The nature of the implementation is examined. The diversity that emerges with distance education is also considered in the design based on student workload.</p> <p>In 2022, AGU Education Information System (https://cat.agu.edu.tr/) was launched, and all ECTS, and course information were uploaded to corresponding webpage.</p>					
Evidence	Biyomühendislik bölümü program bilgileri https://cat.agu.edu.tr/Pages/CoursePlan.aspx?lang=en-US&academicYear=2021&facultyId=38&programId=5036&menuType=unit https://mbg.agu.edu.tr/uploads/formlar/MBG_Undergrad_TR.pdf					
B.1.5. Monitoring and Updating Programs		1	2	3	4	5
Comments	In order to monitor and update the program outcomes, within the scope of the quality process, the matching of the program outcomes with the courses was made with the help of a matrix and published on the website of each department.					
Evidence	https://bioeng.agu.edu.tr/kalite https://mbg.agu.edu.tr/kalite					
B.1.6. Management of Education and Training Processes		1	2	3	4	5

Comments	<p>The Education Committee of AGU holds regular weekly meetings to discuss student and instructor feedback, share good-case examples, develop policies, and coordinate education methodologies and facilities. Committee regularly monitors University Information Services (UIS), Canvas and Schoology Learning Management Systems, and course deliveries to guarantee learner centered high-quality and high-performance education. In addition to the Education Committee, the university assigned an Advisor for Rector for Accreditation to manage and coordinate accreditation processes in all programs.</p> <p>Canvas is extensively used by the faculty members and instructors to announce and follow course works while delivering the courses in faculties and prep program.</p>							
Evidence	<p>https://canvas.agu.edu.tr/login/canvas</p> <p>https://uis.agu.edu.tr/buis/Login.aspx</p>							
B.2. Execution of the Programs								
B.2.1. Teaching Methods and Techniques				1	2	3	4	5
Comments	<p>In order for the university to make student-centered learning, teaching and evaluation, organization are carried out by the education committee of the university, primarily under the leadership of the Vice Rector in charge with education. At the beginning of each semester, informative meetings are held on for faculty members concerning how to design a learner-centered course. During the online education process, a series of training programs were organized for instructors by the Center for Enhancement of Learning and Teaching (CELT) unit of our university in order to apply active learning principles and to experience an effective and efficient online learning process. In the 2021-2022 academic year, our university and department switched to the hybrid education model. Within the scope of this model, at least 30 percent of the courses are conducted face-to-face in accordance with the requirements of the courses (theoretical, practical, etc.). Due to the nature of our department, laboratory courses are conducted face to face.</p>							
Evidenec	<p>UIS course lists (https://uis.agu.edu.tr/buis/Login.aspx)</p> <p>http://celt.agu.edu.tr/</p>							
B.2.2. Measurement and Evaluation				1	2	3	4	5

<p>Comments</p>	<p>In our departments, students are evaluated regularly and their success is followed up seriously. In order to calculate the course load required to determine the ECTS credits of the courses, the necessary information is given to the education committee and is planned within the department as required.</p> <p>Our departments has a competency-based assessment and evaluation system design. Written exams are held to evaluate students' success, and in addition to classical exams and multiple-choice exams, some practical questions are used for assessment. Courses are given on a semester basis and at least one midterm and one final exam are held each academic year. In addition, depending on the content of the courses that students must take during their 4-year education period, various evaluation methods such as homework, project, experimental designs, presentation and report are applied in the program.</p> <p>Course-based assessment methods are designed and implemented in detail to measure the achievement of the targeted learning outcomes. Measurement and evaluation criteria are clearly stated for both laboratory courses and theoretical courses in the syllabus.</p>				
<p>Evidence</p>	<p>Biyomühendislik bölümü program bilgileri</p> <p>http://www.agu.edu.tr/userfiles//21_Aralık_LİSANS_Yönetmeliği.pdf</p> <p>https://mbg.agu.edu.tr/kalite</p> <p>https://mbg.agu.edu.tr/uploads/formlar/MBG_Undergrad_TR.pdf</p> <p>https://mbg.agu.edu.tr/mbg-program-bilgileri</p>				
<p>B.2.3. Student Admission and Recognition and Crediting of Prior Learning</p>	<p>1</p>	<p>2</p>	<p>3</p>	<p>4</p>	<p>5</p>
<p>Comments</p>	<p>National and international student quotas are suggested by the department to the faculty, and forwarded to the Senate by the Faculty Board. After approval, it is proposed to YÖK. The admission process of international students is carried out by our university's International Office and the Foreign Student Selection Commission based on using international exams, diploma scores and country university entrance exams determined by the University Senate and approved by YÖK. National students are placed in our University through the exams conducted by the Student Selection and Placement Center. The criteria and quotas for</p>				

	<p>international students are announced on the website of YÖK and the University before the applications.</p> <p>All students starting at our university can certify their English language level by taking exams conducted by our language school or recognized institutions. Accordingly, they have the chance to skip the preparatory class, to be exempted from the first English lesson given in the first year, or to determine the group they will join after determining the level they will continue in the preparatory class.</p>					
Evidence	<p>Regulation on the Principles of Transfer between Associate Degree and Undergraduate Degree Programs in Higher Education Institutions, Double Major, Minor and Inter-Institutional Credit Transfer</p> <p>Abdullah Gül University Undergraduate Education and Examination Regulation</p>					
B.2.4. The Certification of Qualifications and the Diploma		1	2	3	4	5
Comments	<p>Students are subject to the University Undergraduate Education Policies (http://www.agu.edu.tr/userfiles//21_Aral%C4%B1k_L%C4%B0SANS_Y%C3%B6netmeli%C4%9Fi.pdf), which includes the exams, assessment and graduation conditions determined by our university for undergraduate students.</p>					
Evidence	http://oidb.agu.edu.tr/yonetmelikler					
B.3 Learning Sources and Academic Support Services						
B.3.1. Learning Environment and Resources		1	2	3	4	5
Comments	<p>Especially classrooms and well-equipped laboratories are for bioengineering students are available. Our students benefit from the common learning resources (e.g computer facilities, libraries, sport center etc.) of the university.</p> <p>Classroom, library, computer facilities, social, cultural, sportive activities, infrastructures, dining hall, Student-oriented software, barrier-free university are available in AGU. Applications such as Guidance, Health, Career Office, Genetics Factory, etc. are provided by the responsible units throughout the institution and MBG students benefit from the resources provided.</p>					
Evidence	Not applicable					
B.3.2. Academic Support Services		1	2	3	4	5

Comments	<p>In our BENG, academic advisory services at the undergraduate level are generally carried out face-to-face by faculty members. All students are assigned an academic advisor, who is a faculty member in the department, by the head of the department. Advisors are responsible for helping students on various issues, such as adjustment to university life, academic guidance, and career planning. Besides, the commission members of bioengineering department guide the students according to their needs (internship etc.).</p> <p>In MBG department, academic consultancy at the undergraduate level is generally conducted face-to-face by faculty members. Currently, due to the COVID-19 pandemic, this part is carried out by our faculty members online. An academic advisor is appointed by the department head among full-time faculty members and staff for each student enrolled in the undergraduate program (starting from the preparatory education).</p>					
Evidence	http://oidb.agu.edu.tr/yonetmelikler					
B.3.4. Disadvantaged Groups		1	2	3	4	5
Comments	<p>In our department there is no special plan or procedure for disadvantaged groups. However, at AGU, an Accessible Unit Coordinator exists to provide counseling programs on effective communication skills, coping with difficulties, gaining social skills, and career support for students with disabilities.</p> <p>Facilities and infrastructures (dining hall, dormitory, technology-equipped study areas; health, transportation, information services, distance education infrastructure) are available in appropriate quality and quantity, accessible and available to students' information/use. There are special applications available for the requirements of people with disabilities in our campus.</p>					
Evidence	Not applicable.					
B.3.5. Social, Cultural and Sportive Activities		1	2	3	4	5
Comments	<p>In BENG department there is no special plan and applications for social, cultural and sportive activities. However, a common course (GLB 300 – Societal Impact) was designed</p> <p>Appropriate place, space, budget, and guidance support are provided to student communities for their social, cultural and sports activities. In addition, there is an</p>					

	<p>administrative organization that carries out and manages social, cultural and sports activities. The activities carried out are monitored and developed in line with the needs.</p> <p>Specific to the MBG department, a student club is available where students of the department and other students related to the field can become members (AGUBIOGEN)</p>					
Evidence	Not applicable.					
B.4. Teaching Staff						
B.4.1. Appointment, Promotion and Assignment Criteria		1	2	3	4	5
Comments	<p>The required positions in the departments are reported to the Rector's Office through the Faculty, by evaluating the number of students, teaching quality, and research opportunities. For the positions which found appropriate by the Rector's Office, a suitable position is requested from the Council of Higher Education. In our department, the lack of lecturers and/or the need for the necessary lecturer in the relevant field are met firstly from MBG department and then from other departments within our university. Assignment criteria were revised for faculty members in 2021.</p>					
Evidence	<p>http://www.agu.edu.tr/userfiles//Personel%20Daire%20Başkanlığı/AGÜ_Akademik_Yükseltilme_ve_Atan.pdf</p>					
B.4.2. Teaching Competencies and Development		1	2	3	4	5
Comments	<p>Although there is no special application for our department, trainings are organized throughout our institution, in the middle of the semester or at the end of the semester, in which faculty members can internalize especially active learning models, and practices are carried out in line with these trainings in our department.</p> <p>There are no incentives or rewards for educational activities in our department; however, on the basis of our faculty, the scientific achievements of the faculty members (number of publications, number of projects, etc.) are followed, and the faculty member/members who have the highest number of scientific publications by 2021 are determined.</p>					
Evidence	Not applicable.					

B.5. Learning Resources**Comments**

Especially classrooms and well-equipped laboratories are for bioengineering students are available. Our students benefit from the common learning resources (e.g computer facilities, libraries, sport center etc.) of the university.

Evidence

C. RESEARCH and DEVELOPMENT

C.1. Management of Research Processes and Research Resources

C.1.1. Management of Research Processes

1 2 3 4 5

Comments

As Bioengineering Department, we manage our research activities in a way that are compatible with the academic priorities determined within the framework of Life and Natural Science Faculty's strategic plan and local, regional and national development goals, generating value and transforming it into social benefit. One of the priority areas of Bioengineering Department is the field of "health and biotechnology". All of the scientific studies carried out in our department are compatible with this field and produce academic output.

Research and development outputs of our department has been tracked and improved by the department chair, together with the Dean of faculty. The Dean of Faculty meets regularly with the faculty members at certain intervals and work on the management and improvement of research and development processes.

Evidence

Life and Natural Sciences Faculty's Strategic Plan 2020-2021

http://www.agu.edu.tr/userfiles//1yasam/BirimStratejikPlani_1.pdf

C.1.2 Internal and External Sources

1 2 3 4 5

Comments

Our departments have research laboratories including "Biomaterials and Tissue Engineering Laboratory", "**Cancer Signaling Laboratory**", "Protein Production and Characterization Laboratory", "Drug Discovery and Molecular Effects" and "Rare Diseases and C. elegans Laboratory". Besides, for the new faculty members, plans are made to create physical and financial resources in appropriate quality and quantity, and they are shared at meetings with the Faculty's administration.

In 2022, one 1001 and one 3501 research projects submitted by the faculty members of the Bioengineering Department were granted by the TUBITAK Academic Research Funding Programmes Directorate (ARDEB). Besides, a B group research project and two A group projects were granted by the Health Institutes of Turkey (TUSEB). With the budgets of the newly granted projects, the

	<p>total income from external sources of our department has been increased to approximately 2,5 million Turkish Lira.</p> <p>In addition, there are three thematic laboratories in the Central Research Laboratory of AGU related to our department's research and development activities. These are the cell biology laboratory, the biomolecule production and characterisation laboratory, and the confocal imaging laboratory. These laboratories are open to our faculty members of our departments, and these laboratories are structured to be used effectively for industry collaborations.</p>					
Evidence	<p>https://bioeng.agu.edu.tr/yayinlar-ve-projeler</p> <p>http://isoglulab.com/</p> <p>https://www.ortakcilab.com/</p> <p>http://www.kaplanlab.com/index.html</p> <p>http://merlab.agu.edu.tr/hucre-biyolojisi-lab</p> <p>http://merlab.agu.edu.tr/biyomolekuler-uretim-lab</p> <p>http://merlab.agu.edu.tr/konfokal-goruntuleme-lab</p> <p>https://mbg.agu.edu.tr/laboratuvarlar</p>					
C.1.3. PhD Programs and Post-doc Facilities		1	2	3	4	5
Comments	<p>The application processes of PhD programs, the number of registered students and graduates, and the development trends are monitored by the Graduate School of Engineering and Science. The faculty members of the department directly contribute to the Bioengineering Master of Science and PhD programs.</p>					
Evidence	<p>http://fbe.agu.edu.tr</p> <p>http://fbe.agu.edu.tr/bioengineering</p>					
C.2. Management of Research Processes and Research Resources						
C.2.1. Competence and Development of the Research		1	2	3	4	5
Comments	<p>The head of department meets at regular intervals to evaluate and develop the research competence of the faculty member of Bioengineering department, and the situation is assessed. According to the decisions and feedbacks discussed in these meetings, necessary precautions are taken. Department monitors the applications</p>					

	to improve the research competence and evaluates the obtained data with faculty members.					
Evidence	https://zoom.us/j/93627812980?pwd=cHBCR1VMRXpnREV6N2RXQnhDTkxuUT09					
C.2.2. National and International Joint Programs and Joint Research Units		1	2	3	4	5
Comments	Our department supports all initiative and application approaches for national and international joint programs. With the other units of the Faculty and University, our department welcomes all plans and processes related to participating in networks and establishing research collaborations					
Evidence	Not applicable					
C.3. Research Performance .						
C.3.1. Performance Evaluation of Faculty Members of Bioengineering Department		1	2	3	4	5
Comments	<p>University's research activities are monitored annually, evaluated, compared with targets, and the deviations are investigated. All the data obtained by the related units such as Technology Transfer Office, Carrier Office, International Office and Quality Office are systematically evaluated in terms of the focus areas, awareness within and outside the University. The competition with other universities is followed by the benchmarking technique, systematic and permanent performance evaluations is provided. As mentioned earlier, our department contributes with its credentials and outputs to the process.</p> <p>One of the priority areas of AGU MBG department is the field of "human health". All of the scientific studies carried out in our department are compatible with this field and produce academic output. In our Faculty, the coordination of research and development processes is carried out under the presidency of the Dean, together with the department heads. The Vice-Rector in charge of research, the advisor to the Rector for the research and the Dean of our Faculty come together at certain intervals and work on the management and improvement of research and development processes.</p>					
Evidence	Not applicable					

C.3.2. Performance Evaluation of Faculty Members of Bioengineering Department	1	2	3	4	5
Comments	<p>The University administration requests an annual report from the faculty members to improve research competence. Besides, our department periodically informs the Faculty administration about up-to-date situations and our faculty members' research and developments activities. According to the data obtained by the faculty administration, necessary precautions are taken.</p> <p>Research topics of Molecular Biology and Genetics Department can be classified as cancer, genetic diseases, organoids and drug metabolism, proteomics, immunology and biochemistry. Human-based genetic mechanisms are studied in the Department of Molecular Biology and Genetics. There are a total of 4 projects in TÜBİTAK programs such as 1001 and 1005, which our professors in the department specified within the scope of research activities will be implementing in 2022. In addition, they take part as the coordinator in 2 nationally funded projects (Turkish Society of Hematology and TÜSEB A group project). In addition, there are 3 projects in 1002 TUBITAK programs. Thus, there are a total of 9 projects carried out by the faculty members of our department.</p> <p>In addition, there are a total of 3 TÜBİTAK and nationally sourced (ERÜ BAP) projects in which they are involved as researchers. In these projects, our graduate and doctoral students do their research, and our undergraduate students are involved in research projects and gain experience. Our undergraduate students, who are in their senior year, carry out their graduation thesis courses by carrying out their projects in our research laboratories. Three undergraduate students were supported within the scope of STAR intern researcher scholarship program for undergraduate students supported by TUBITAK. Our department has provided both our students and other university students with the opportunity to do their internships. In 2022, a total of 16 articles were published in national and international journals by the faculty members of our department.</p>				
Evidence	<p>http://www.agu.edu.tr/userfiles//Fuarlar/GSES/Ara%C5%9Ft%C4%B1rma_G%C3%B6revlisi_Faaliyet_Rap.pdf</p> <p>https://mbg.agu.edu.tr/yayinlar</p> <p>https://mbg.agu.edu.tr/projeler</p>				

D. SOCIAL CONTRIBUTION

D.1. Management of Social Contribution Processes and Social Contribution Resources

D.1.1. Management of Social Contribution Processes

1

2

3

4

5

Comments

The management of the social contribution processes was established first at the departmental and then at the faculty levels. Members in the department and Faculty have been defined. To contribute to society, the university's physical infrastructure is used for congresses, workshops, and career workshops planned for high school students. The institution provides all technical support. The institution determines financial requirements. Academicians from the Faculty of Life and Natural Sciences have applied for and received funding for various projects. These projects research diseases' molecular mechanisms better and develop drugs and novel treatment methods for diseases. Master's and doctoral students are trained through these projects.

All of these activities are related to SDG 3. In line with social contribution activities in our department, activities such as research projects, academic articles, participation in congresses and awareness-raising seminars were carried out on topics such as understanding the molecular mechanism of the diseases, developing drugs and innovative treatment methods that can be used in the treatment of communicable and non-communicable diseases, all of which are mentioned in SDG 3.

The authorities and responsibilities are determined, and studies are carried out, in order for social contribution activities to produce value and turn them into social benefit in accordance with the social contribution policy. The results of the practices are monitored, and improvements are made by evaluating the follow-up results.

Evidence

Not applicable.

D.2.1. Management of Social Contribution Processes

1

2

3

4

5

Comments

The results related to the management of social contribution processes and the operability of the organizational structure in the institution are monitored.

Evidence

Congress and conference attendances:

İsmail Akçok, 5th International Eurasian Conference of Biological and Chemical Sciences, <https://www.eurasianbiochem.org>

Özkan Fidan, III. International Enzyme and Bioprocess Days, <https://www.ebdays.org/page/programme>

Oktay İ. Kaplan, 5th European Cilia conference, <https://www.cilia2022.de>

İsmail Akçok, 10th International Drug Chemistry Congress, March 10-13 2022, Antalya/Türkiye, <http://www.ilac.kongresi.org>

Seminars:

Oktay I. Kaplan gave a seminar on 'CRISPR Cas9 Technology', which can be used in important health applications such as gene therapy, with the AGGA invitation of Sapiens Academy from Azerbaijan.

https://aguedutmy.sharepoint.com/:i:/g/personal/ozkan_fidan_agu_edu_tr/EVyI_CQngeglHg_YLIQgu12IBIff-1011fJgcj7e6yXcVsw?e=zKfO2z

Oktay I. Kaplan gave a seminar titled 'A new era in the fight against rare diseases' as part of our university's 'Public education seminar series'.

https://www.youtube.com/watch?v=qydEocodMEs&ab_channel=AbdullahG%C3%BCI%C3%9Cniversitesi

Application of -OMICS technologies in Reproductive Medicine. Necati Fındıklı. 25.03.2022. Online.

Host, Pathogen, and Environment: Interactions and Disease Development. Dr. Mahmoud Aly. 11.05.2022

Workshops:

Oktay I. Kaplan held a workshop for high school students on 'CRISPR Cas9 Technology', which will play an important role in the treatment of some communicable and non-communicable diseases within the scope of SDG 3, such as gene therapy.

New courses:

Our department faculty members Oktay Kaplan and Özkan Fidan offered a GLB course, which includes many topics related to SDG 3 and to increase the awareness of students from different departments on these issues.

Projects:

Production of High Value Added Carotenoids in Engineered Microorganisms and Investigation of Antiviral Properties against Hepatitis C Virus, Tübitak 3501, PI: Özkan Fidan.

PATL1 Geninin Meyve Sineği ve C. Elegans Modellerinde Hastalık Geni Olarak Doğrulanması ve Nöronlardaki Etkileşim Partnerlerinin BioID Yöntemiyle Tanımlanması TÜBİTAK Projesi Kaplan O. İ., Çelik Fuss A.(Yürütücü)

Meme Kanserinin Tedavisine Yönelik Çok Fonksiyonlu, Hedeflenmiş, Özgün Nano taşıyıcıların Geliştirilmesi, In Vitro Ve In Vivo Etkinliklerinin İncelenmesiSürdürülebilir Kalkınma TÜBİTAK Projesi Dinçer Işoğlu S. (Yürütücü)

Fıtık Tedavisinde Kullanılmak Üzere Çift Katmanlı Bir Yamanın Geliştirilmesi ve Etkilerinin In Vitro ve In Vivo Olarak İncelenmesiSürdürülebilir Kalkınma Türkiye Sağlık Enstitüleri Başkanlığı (TÜSEB) Projesi Işoğlu İ. A. (Yürütücü)

Çift Katmanlı Yeni Nesil Bir Kardiyak Yamanın Geliştirilmesi ve Miyokart Hasarlarının Tedavisine Yönelik In Vivo Etkinliğinin İncelenmesiSürdürülebilir Kalkınma TÜBİTAK Projesi Işoğlu İ. A. (Yürütücü)

Tay-Sachs Hastalığında Mirna'ların Lizozomal Ekzositoz'Un Düzenlenmesindeki Biyolojik Rolünün Araştırılması TÜBİTAK Projesi Seyrantepe V.(Yürütücü), Saçar Demirci M. D., Demir S. A.

Articles:

BAYRAM, N. N., TOPUZOĞULLARI, M., İŞOĞLU, İ. A., & DİNÇER İŞOĞLU, S., (2022). RAFT-synthesized POEGMA-b-P4VP block copolymers: preparation of nanosized micelles for anticancer drug release. *POLYMER BULLETIN* , vol.79, no.11, 9575-9588

Cicek E, Kucuktas FM, Yenigul M, Gencer Akcok EB. Cytotoxic and cytostatic effects of targeting mTOR and Hedgehog pathways in acute myeloid leukemia. *Experimed*. 2022. doi: 10.26650/experimed.1193721.

Differential in vitro anti-leukemic activity of resveratrol combined with serine palmitoyltransferase inhibitor myriocin in FMS-like tyrosine kinase 3-internal

tandem duplication (FLT3-ITD) carrying AML cells. *Cytotechnology*. 2022. doi.org/10.1007/s10616-022-00527-1.

Erol, I., Kotil, S. E., FİDAN, Ö., YETİMAN, A. E., Durdagi, S., & ORTAKCI, F., (2023). In Silico Analysis of Bacteriocins from Lactic Acid Bacteria Against SARS-CoV-2. *PROBIOTICS AND ANTIMICROBIAL PROTEINS* , vol.15, no.1, 17-29.

Ersöz NŞ, Adan A. Resveratrol triggers anti-proliferative and apoptotic effects in FLT3-ITD-positive acute myeloid leukemia cells via inhibiting ceramide catabolism enzymes. *Med. Oncol.* 2022;39(35):1-13. doi.org/10.1007/s12032-021-01627-2.

Fidan, O. (2022). Investigation of Antiviral Potential of Food Carotenoids and Apocarotenoids against RNA-dependent RNA Polymerase of Hepatitis C Virus. *Bitlis Eren University Journal of Science*, 11 (3), 931-942.

Fidan, O., Mujwar, S., Kciuk, M. (2022). Discovery of adapalene and dihydrotachysterol as antiviral agents for the Omicron variant of SARS-CoV-2 through computational drug repurposing. *Molecular Diversity*, 2022.

Fidan, O., Ren, J., Zhan, J., (2022). Engineered production of bioactive natural products from medicinal plants. *World Journal of Traditional Chinese Medicine*, 8 (1), 59-76.

Gumustop, I., & Ortakçı, F., (2022). Comparative genomics of *Leuconostoc lactis* strains isolated from human gastrointestinal system and fermented foods microbiomes. *BMC Genomic Data* , vol.23, no.61, 1-14.

GÜRDAP, S., BAYRAM, N. N., İŞOĞLU, İ. A., & DİNÇER İŞOĞLU, S., (2022). Sulfobetaine-Based Homo- and Copolymers by RAFT: Cross-Linked Micelles and Aqueous Solution Properties. *ACS APPLIED POLYMER MATERIALS* , vol.4, no.9, 6303-6311. Bayram, N. N., Ulu, G. T., Topuzoğullari, M., Baran, Y., & Dinçer Işoğlu, S., (2022). HER2-Targeted, Degradable Core Cross-Linked Micelles for Specific and Dual pH-Sensitive DOX Release. *MACROMOLECULAR BIOSCIENCE* , vol.22, no.1.

Mujwar, S., Sun, L., Fidan, O., (2022). In silico evaluation of food-derived carotenoids against SARS-CoV-2 drug targets: Crocin is a promising dietary supplement candidate for COVID-19. *Journal of Food Biochemistry*, 00, e14219.

Pir MS, Bilgin HI, Sayici A, Coşkun F, Torun FM, Zhao P, Kang Y, Cevik S, Kaplan OI. ConVarT: a search engine for matching human genetic variants with

variants from non-human species. *Nucleic Acids Res.* 2022 Jan 7;50(D1):D1172-D1178. doi: 10.1093/nar/gkab939. PMID: 34718716; PMCID: PMC8728286.

Pir MS, Cevik S, Kaplan OI. ConVarT: Search Engine for Missense Variants Between Humans and Other Organisms. *Curr Protoc.* 2022 Nov;2(11):e619. doi: 10.1002/cpz1.619. PMID: 36413109.

Pir, M. S., Bilgin, H. I., Sayici, A., Coskun, F., Torun, F. M., Zhao, P., ... Kang, Y.(2022). ConVarT: a new search engine for orthologous variants for functional inference of human genetic variants. *EUROPEAN JOURNAL OF HUMAN GENETICS* , vol.30, no.SUPPL 1, 504-505.

Sahin HN, Adan A. Combined effect of midostaurin and sphingosine kinase-1 inhibitor on FMS-like tyrosine kinase 3 (FLT3) wild type acute myeloid leukemia cells. *Turkish J. Biochem.* 2022. doi.org/10.1515/tjb-2021-0152.

Tecik M, Adan A. Therapeutic Targeting of FLT3 in Acute Myeloid Leukemia: Current Status and Novel Approaches. *Onco Targets Ther.* 2022. doi:10.2147/OTT.S384293.

Turan MG, Kantarci H, Temtek SD, Cakici O, Cevik S, Kaplan OI. Protocol for determining the average speed and frequency of kinesin and dynein-driven intraflagellar transport (IFT) in *C. elegans*. *STAR Protoc.* 2022 Sep 16;3(3):101498. doi: 10.1016/j.xpro.2022.101498. Epub 2022 Jun 24. PMID: 35776634; PMCID: PMC9250072.

Yenigül M, Akçok İ, Gencer Akçok EB. Ethacrynic acid and cinnamic acid combination exhibits selective anticancer effects on K562 chronic myeloid leukemia cells. *Mol Biol Rep.* 2022. doi:10.1007/s11033-022-07560-5. Ersöz NŞ, Adan A.

Yenigül, M., Akçok, İ., Gencer Akçok, E. B. Ethacrynic acid and cinnamic acid combination exhibits selective anticancer effects on K562 chronic myeloid leukemia cells. *Molecular Biology Reports*, **49**,7521–7530 (2022)

YETİMAN, A. E., & ORTAKCI, F., (2023). Genomic, probiotic, and metabolic potentials of *Liquorilactobacillus nagelii* AGA58, a novel bacteriocinogenic motile strain isolated from lactic acid-fermented shalgam. *Journal of Bioscience and Bioengineering* , vol.135, no.1, 34-43.

Yetiman, A. E., Keskin, A., Darendeli, B. N., Kotil, E., Ortakçı, F., & Doğan, M., (2022). Characterization of genomic, physiological, and probiotic features

	Lactiplantibacillus plantarum DY46 strain isolated from traditional lactic acid fermented shalgam beverage. Food Bioscience, vol.46, no.101499, 1-13.				
D.1.2. Resources	1	2	3	4	5
Comments	Our department has plans for the preparation of appropriate resources for the contribution to departmental societal impact. In order to contribute to the society, the physical infrastructure of the university is used for congresses, workshops, and career workshops planned for high school students. All technical support is provided by the institution. Financial requirements are determined by the institution.				
Evidence	<p>Projects:</p> <p>Production of High Value Added Carotenoids in Engineered Microorganisms and Investigation of Antiviral Properties against Hepatitis C Virus, Tübitak 3501, PI: Özkan Fidan.</p> <p>PATL1 Geninin Meyve Sineği ve C. Elegans Modellerinde Hastalık Geni Olarak Doğrulanması ve Nöronlardaki Etkileşim Partnerlerinin BioID Yöntemiyle Tanımlanması TÜBİTAK Projesi Kaplan O. İ., Çelik Fuss A.(Yürütücü)</p> <p>Meme Kanserinin Tedavisine Yönelik Çok Fonksiyonlu, Hedeflenmiş, Özgün Nanotaşıyıcıların Geliştirilmesi, In Vitro Ve In Vivo Etkinliklerinin İncelenmesiSürdürülebilir Kalkınma TÜBİTAK Projesi Dinçer Işoğlu S. (Yürütücü)</p> <p>Fıtık Tedavisinde Kullanılmak Üzere Çift Katmanlı Bir Yamanın Geliştirilmesi ve Etkilerinin In Vitro ve In Vivo Olarak İncelenmesiSürdürülebilir Kalkınma Türkiye Sağlık Enstitüleri Başkanlığı (TÜSEB) Projesi Işoğlu İ. A. (Yürütücü)</p> <p>Çift Katmanlı Yeni Nesil Bir Kardiyak Yamanın Geliştirilmesi ve Miyokart Hasarlarının Tedavisine Yönelik In Vivo Etkinliğinin İncelenmesiSürdürülebilir Kalkınma TÜBİTAK Projesi Işoğlu İ. A. (Yürütücü)</p> <p>Tay-Sachs Hastalığında Mirna'ların Lizozomal Ekzositoz'Un Düzenlenmesindeki Biyolojik Rolünün Araştırılması TÜBİTAK Projesi Seyrantepe V.(Yürütücü), Saçar Demirci M. D., Demir S. A.</p>				

Syk Kinaz Proteininin SH2 Domainlerinin Hedeflenmesi ve Bu Hedeflenmenin In Vitro Olarak İncelenmesi, TÜSEB A grubu, 2022 - Devam ediyor, Yürütücü: Emel Başak GENCER AKÇOK.

Bardet-Biedl Sendromu Proteinlerinin Silya Girişindeki Rolünün Araştırılması, TÜBİTAK 1002 (621638), Yürütücü: Sebiha ÇEVİK KAPLAN.

Multipl Skleroz ve Bilişsel Bozukluklar İçin Nöroenflamasyon Üzerine Çoklu Hedefleme: Siproksifan ve Fingolimod Bazlı Hibrit Türevlerinin Tasarımı, Sentezi ve Beyin Organoidlerinde Biyoaktivitelerinin Belirlenmesi, TÜBİTAK 1001 (119Z389), 2021- devam ediyor, Yürütücü: Alaattin ŞEN.

PI3K-AKT-mTOR Yolağı ve Histon Deasetilaz Enzimlerinin Hedeflenmesinin Akut Myeloid Lösemi Hücreleri Üzerine Antitümör Etkisinin İncelenmesi, TÜBİTAK (121Z691), 2021 - devam ediyor, Yürütücü: Emel Başak GENCER AKÇOK.

İmmünoglobulin G Glikan Yapılarının Sentezi, İşlevi ve Terapötik Potansiyeli, TÜBİTAK 1001 (121S437), Yürütücü: Altan ERCAN.

Biyoaktivitesi Geliştirilmiş Şeker Pancarı Yapağı Protein Hidrolizatlarının Çift Katlı Emülsiyon İle Mikroenkapsülasyonu, TÜBİTAK-3501, 2021- 2024, Araştırmacı: Aysun ADAN.

CONCLUSION and EVALUATION

1. Quality Assurance System:

Strengths

- Determining and updating the purpose, target and performance indicators of the mission, vision, core values, quality policies and strategic plan with stakeholder participation of the Institution,
- We create the Quality Assurance System and Education, Research, Community Contribution SWOT cycles in a written and defined form specific to AGU.
- Having both international students and lecturers at L&NS; Academics and students go abroad through exchange programs for training and internships, and international students and lecturers come to our Faculty.

Opportunities

- The use of Quality Assurance System and implementation of SWOT analysis for Education, Research and Contribution to Society
- The use of quality-related teaching, monitoring and evaluation to route the feedback obtained.
- The strategic plan system collects data, sets goals, and reviews and evaluations.
- L&NS depends on the strategic planning processes in establishing and maintaining Quality Assurance. It is aimed that the strategic planning process and practices will be widely accepted and become a fundamental part of our faculty culture.
- Considering that L&NS should evaluate all its activities realistically and critically to strengthen its position in the rapidly changing world of higher education, regular self-evaluation processes regarding all activities are among utmost priorities.
- It is also aimed to improve all processes and institutionalize process management.

2. Education

Strengths

- They are gaining the awareness of "solution to globalisation problems", "transdisciplinary

research culture", "team work" and "contribution to society" with a student-oriented approach in the compulsory courses that all AGU students take together and form joint teams.

- Initiating the pilot modular program, the 3-Dimensional Curriculum (Individual Development Pathway, Global-Local Studies Pathway and Specialization Pathway) approach is adopted within the framework of innovative university design at AGU.
- The L&NS supports and contributes to the national and international internships of the students,
- The Faculty provides student-oriented education with many applied methods.
- The young and dynamic faculty members and the small size of the university increase productivity by creating a warm working environment.
- Sharing the video recordings taken in the natural experimental environment and the analysis and interpretation of the obtained data with the students in the laboratory and project courses held with Distance Education

Opportunities

- Making measurements and evaluations within the continuous improvement cycle and analysing the results, making the necessary concrete improvements and sharing them with the stakeholders,
- In line with the strategic objectives of the AGU, we are training the trainers particularly regarding quality processes and measuring the effectiveness of the training.
- Systematic monitoring and evaluation of the Program Outcomes and the results of the TYYÇ? Relationship.
- Developing different measurement and evaluation methods to determine whether the Program Educational Objectives and Program Outcomes are achieved and periodically monitoring them
- Online exams, homework, project etc., in distance education. Determining the measures to be taken to prevent cheating incidents that may occur during events

3. Research and Development:

Strengths

- Qualified faculty conducting AR-GE, TUBITAK and BAP studies, raising awareness about

science and participating institution-related processes actively. At L&NS, distinguished scientists are allocated who carry out R&D studies such as TUBITAK, TUSAŞ and BAP, and support the dissemination of science.

Opportunities

- Reviewing the effectiveness and efficiency of research results, ensuring its continuity and quality assurance
- Increasing cooperation on a local and global scale in line with the objectives and finalizing successful applications from these cooperations

4. Social Contribution:

Strengths

- Establish the Social Contribution Commission in the Faculty and Departments to monitor the 17 basic development goals of the UN (17 SDGs) and increase institutional awareness on this issue.

Opportunities

- Reviewing social contribution processes and results in terms of effectiveness and efficiency, taking necessary measures to ensure the continuity of successful results,
- Further development of cooperation with stakeholders on social contribution and monitoring the results, making improvements by monitoring the activities of the Social Contribution Commission

5. Administration

Strengths

- Our Faculty is committed to excellence in education and research, student-oriented education, freedom in management and academic life, autonomy, participation, respect for differences, egalitarianism, rationality, protecting ethical values, defending fundamental rights and freedoms, caring about public and social responsibility, and global issues. It meticulously carries out all the necessary studies and improvements to continue to have all the qualities such as sensitivity to nature and environmental problems and maintaining its institutional culture.

- L&NS has established commissions to ensure participation and transparency in all management processes.

Opportunities

- The most crucial resource that our Faculty should have to achieve its future goals is qualified human resources. Although our Faculty has qualified human resources in its academic and administrative staff, it is not at a sufficient level to realise the future goals of the Faculty. To overcome this deficiency, the employment of qualified personnel who will work in academic fields is considered.
- Physical facilities need to be developed and improved.
- The establishment of an institutional quality information system that will provide a comprehensive analysis of information related to quality processes with the integration of information systems created for different purposes (UIS, Schoology, Canvas, AVESİS, BAPSİS) has not been completed yet
- Elimination of deficiencies regarding how the progress and effectiveness of the Digital Transformation studies in education, research, etc. are followed, how the problems to be encountered will be handled (risk management)
- We are reshaping the supplier management by considering the SDGs beyond the legal framework and making improvements to provide additional benefits in terms of other social and environmental objectives while ensuring the procurement of quality service in this process.