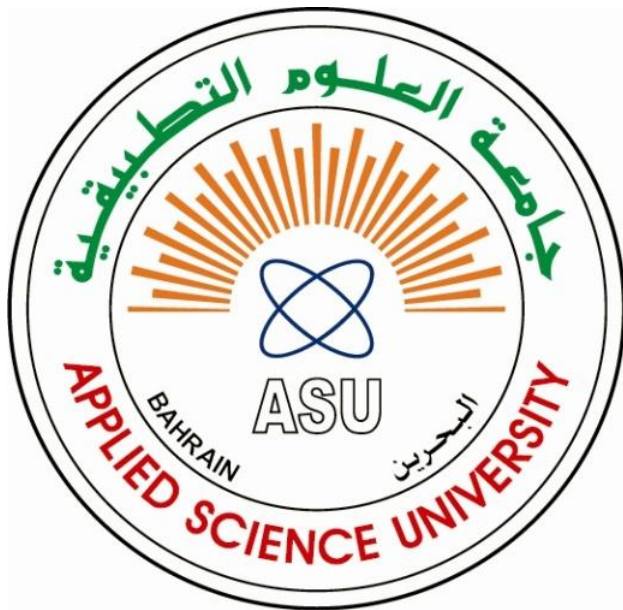


Deanship of Research and Graduate Studies

Research Handbook: Principles and Structure



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Forward

Welcome to Applied Science University Research Handbook. Here at ASU, we strongly believe that research is the lifeblood of the University. It powers everything we do, from our programmers developments and design to our innovative teaching methods. Its impact can be seen in our growing contribution to the economy and wealth generation of the Kingdom of Bahrain. All our staff and students benefit from the world-class facilities within a new modern campus, which was officially opened in 2014, that make ASU one of the best learning and research environments in Bahrain.

Delivering research excellence depends on attracting, developing and retaining high-achieving research staff. We will continue to support the development of all staff and to nurture our early career researchers. This Handbook was written to disseminate our achievements to the wider community both at national and international levels. I hope you will find it enjoyable as much as we have in compiling it.

Prof. Dr. W. Alkhaja
Chairman of Board of Directors

Message from the President

Research is one of the three pillars of our University and it will undoubtedly play a major role in the long term sustainability of ASU. It is my great pleasure to introduce to you our Research Handbook from the Deanship of Research and Graduate Studies. The aim of the Handbook is to disseminate our research strategies and policies and articulate the road map for their implementation. We hope you enjoy reading about the University's work and invite you to contact us in order to move forward with us in areas of research that create new and exciting pathways into the future.

Happy Reading.

Prof. Dr. Ghassan Aouad
President

**Message from the VP
Academic Affairs and Development**

At Applied Science University (ASU), research constitutes one of the seven strategic objectives that the University has put in place to support its mission and vision. This reflects the importance we give to research in order to develop a research culture and deliver high quality research outputs which will ultimately have a beneficial impact on the community.

I cordially invite you to browse through this Research Handbook, a useful tool for both academic staff and students as well as other stakeholders. This handbook will shed light on all matters related to research at ASU, starting from the research strategy, to operational plans, research initiatives and activities, through to research publications, and much more. I hope you enjoy reading it.

Dr. Assim Al-Hajj
VP for Academic Affairs and Development

Prologue

In this handbook, we give an overview of the research activities in ASU and assist new and established investigators in the conduct of research. The importance of research can be seen at the national level through the establishment of a national research strategy launched by the Higher Education Council and through the regulation of funding bylaws to support Bahraini economic and resources development. We aim to retain and develop our existing high-performing staff, enabling them to realize their full potential in undertaking world-class teaching and research to place the University in the top 10 universities in the GCC.

The importance of research at ASU makes the University to articulate research strategies and bylaws involving all stakeholders from students and staff to employers and establishes a Deanship for research and graduate studies. The linkage between research and postgraduate studies is because postgraduate research projects are main resources of applied research of our students and faculty. The other important factor in the ASU research strategy is the connection between research and teaching. Research based teaching is well practiced at ASU beginning with the research methodology course taught under the supervision of the deanship with the colleges' cooperation and further, academic staff enhance each course syllabus continuously to update the teaching material according to the latest research on the subject.

We are working to maintain the position of the University among other universities in the Kingdom of Bahrain, and to develop the university to a high rank within the Gulf region, the Arab region, and internationally.

The Dean of Research and Graduate Studies

Chapter One

Vision and Guiding Principles

1.1 Vision

The University is committed to a program of sustained academic excellence in research, knowledge transfer, and graduate studies in all of its core disciplines.

1.2 Guiding Principles

- Interdisciplinary and collaborative research, knowledge transfer and graduate studies will be at the heart of our investment, while still maintaining support for discipline-based research.
- We will continue to encourage and emphasize the international dimensions of research and knowledge transfer.
- In all circumstances, staff and students must consider the ethical implications and psychological consequences for the participants in their research. The essential principle is that the investigation should be considered from the standpoint of all participants, and foreseeable threats to their psychological well-being, health, values, or dignity should be eliminated. Staff and students should recognize that investigations involve individuals of different ages, gender and social backgrounds may have implications on participants.

- We shall promote teaching-research partnership.
- We will involve key stakeholders, the wider community, and end users when identifying research priorities, to maximize the University's impact.
- Investment will be targeted to support high potential early career researchers.
- We will place great importance on how we communicate the rationale, significance, and impact of our research.
- We will provide a strong and effective governance and strategy framework for research, knowledge transfer, and graduate studies.

1.3 Aims and Objectives

To be recognized among the top 10 universities in the GCC region for research, the university has developed the followings aims and objectives:

- Establish widely acknowledged leadership in at least three priority research areas, by accelerating progress with high profile promotional activities.
- Implement a robust research performance management framework.
- Invest strategically in the research infrastructure and underpin our activities with the latest research management systems.
- Ensure our research outputs are appropriately managed and widely disseminated in order to improve scholarship and knowledge transfer.
- Develop a rich, world-class portfolio of Masters

programs.

- Develop a practical, sound, and sustainable model for Research-Teaching partnership.

Chapter Two

Research Priorities, Strategic and Operational Objectives

2.1 ASU Research Strategic Priorities

ASU relies the National Strategic Research plan for its planning and research funding. According to National Research Strategy (2014-2024), “The Bahraini government in its Vision 2030 has identified priority industries and areas. The Economic Development Board (EDB) National Strategy for Bahrain and the Higher Education Strategy have also identified sectoral priorities, which will feed into the National Research Strategy priority areas. The priority research areas build upon the Kingdom’s relevant human capital strengths and recognize the need to promote applied research in areas of relevance to the economic and social needs of Bahrain.” Therefore, ASU’s priorities for research are within the context of developing a research culture and delivering high quality research outputs to take advantage of funding and extensive resources to support this. ASU has developed four Key Priorities:

SP1: Invest in increasing the number of active research staff through appropriate recruitment and staff development.

SP2: Identify and support niche areas for interdisciplinary research drawing on the collective subject expertise in its constituent colleges.

SP3: Increase the overall quality and quantity of published outputs and enhance the research culture.

SP4: Increase exposure of staff to national and international research communities through involvement in relevant conferences and meetings and building research networks.

2.2 ASU Strategic Objectives

For strategic investment, ASU adopts financial planning to

improve research outcomes by:

- Maintaining existing posts within priority areas.
- Funding new posts in areas of strategic priority.
- Providing infrastructure support for the above.

For areas of growth establishment, ASU plans to:

- Identify and establish priority areas for growth while consolidating our strengths.
- Explore and identify opportunities for productive cross-disciplinary collaboration in and outside the college and department boundaries.
- Explore and identify collaboration outside the university, build upon and strengthen existing links.

For research activity/culture enhancement, ASU aims to;

- Increase the amount of research output and the number of research active staff and ensure that majority of newly recruited faculty members are research active in priority areas.
- Increase research resources by research active staff in teaching, research led, or research based elements on both undergraduate and postgraduate programs.
- Encourage research activity through seminars, workshops, and participation in postgraduate supervisory panels.

For external profile enhancement, ASU plans to;

- Increase participation and involvement in the editorial boards of international and reputable journals.
- Develop Annual Distinguish Seminar series and establish the Annual Master Class, in which one or more distinguished researchers are invited to work on a specific research theme.
- Increase the presence of ASU staff on program committees of major national/international conferences/workshops.

2.3 Research-Teaching Partnership

- All undergraduate students should be connected with senior members of research staff (mainly Professors).

This exposure could take the form of mentoring, project supervision and/or teaching.

- All senior research staff should act as Technical Editors (TE) of the taught undergraduate modules. Each module will have a TE supported by members of staff who are qualified to teach the module. The overall responsibilities of a TE are to ensure the technical quality of the module's contents, supplementary material, reading list, revisions, etc.
- Each postgraduate student should have a supervisory panel consisting of at least one research active and one non-research active staff.
- Enhance the involvement of our graduate students in undergraduate and postgraduate teaching.

2.4 Operational Targets

Measurable and realistic research targets are classified according to the following headings:

2.4.1 Publications

It is expected that publications appear in 2/3/4* rated journals/conferences (see Appendix A). The ratio between Conference and Journal publications should always be 3:1. Each member of staff is to publish at least one journal paper per year.

2.4.2 Research Impact

It is our belief that measurement and analysis of the impact of our research findings is crucial to the further development of our research and to the enhancement of our external visibility. It is expected therefore that each member of staff will be engaged in as many as possible of the following. This list includes but is not limited to,

- Membership of editorial boards of major reputable journals.
- Membership of program committees of major international conferences/seminars.
- Citation: H- & I-index

- External examiners (research degrees MSc and/or PhD at other universities).
- The uptake of research findings by industry.
- Membership and fellowship awards from learned international professional bodies.
- Members of government advisory committees.
- Members of international research councils (e.g. European Research Council, USA National Science Foundation, etc).
- Keynote and plenary addresses at major international conferences.
- Named Lectures.
- Industrial advisory board memberships.
- Positions in national and international strategic advisory bodies.

2.5 ASU Strategic Performance Measurement (KPIs)

Key Performance Indicators over the Five years of research planning have been identified as:

Indicators	Status	Review Frequency	Target				
			16-17	17-18	18-19	19-20	20-21
Number of research groups/centers in key priority areas	0	Year	1G	1G	1G	1C	1C
Number of research areas in which the University can make a credible claim to have research strengths.	0	Year	1	1	1	1	1
Number of cross disciplinary collaborative research projects within the University	0	Year	0	1	0	0	1
Percentage of external collaborative publications in which the University is involved	0	Year	5%	6%	7%	8%	9%

Number of external collaborative institutions in which the University is involved	0	Year	1	0	1	0	0
Percentage of total published outputs by members of faculty in internationally world leading journals.	2%	Semester	1		1		
Percentage of staff involved in developing and delivering research based teaching across the University.		Year	60	70	80	90	100
Percentage of faculty attending workshops/seminars or involved in postgraduate supervisory activities		Year	50%	60%	70%	80%	90%
Number of faculty involved on editorial boards	5	Year	10	15	20	25	30
Number of research seminars delivered by external experts	5	Year	5	6	7	8	10
Number of faculty involved in national/international conference organization.	1	Year	2	3	4	5	6

Chapter Three

ASU Research Governance

3.1 Introduction

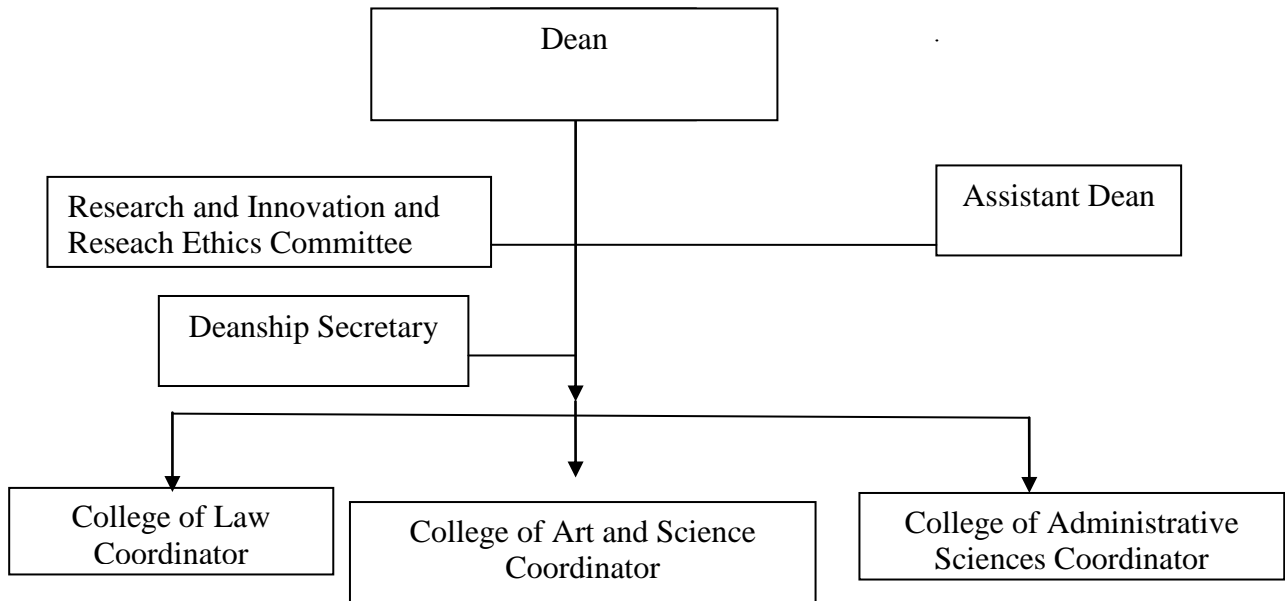
For the purpose of research regulation at the University, ASU has established the ASU Research Bylaw listed in Appendix (B). The Research Bylaws requires a Deanship for Research and Graduate Studies to govern the research at ASU together with research coordinators representing each college on the deanship panel. For strategic research objective planning and implementation, there is a committee entitled: ‘Research and Innovation and Research Ethics Committee’ that aids the deanship in the governing research at the ASU. The bylaws also states the deanship’s tasks and services offered to ASU members together with the budget allocated to research (currently 3% of the University’s revenues) to support ASU researchers.

3.2 Deanship of Research and Graduate Studies

3.2.1 Deanship Structure

The Deanship is governed at ASU by the Dean of Research who works under the VP for the Academic Affairs and Development. The Dean is a member of the University Council and the chair and the Research and Innovation and Research Ethics Committee. This allows him to pass matters related to scientific research or graduate studies to the council and to the committee members.

The structure of the Deanship allows a seamless two-way dissemination of information by University staff in a timely fashion. The Deanship is formed by two units- Scientific Research and Graduate Studies Units. The Dean has an Assistant Dean who that helps the Dean with assigned tasks as shown below:



To this end, and following best practices, each college has a research coordinator who should have a good grasp of the research interests and activities within his/her college. Furthermore, colleges representatives can participate in committees formed by the deanship.

3.2.2 Deanship Objectives and Tasks

The main objectives of the Deanship of Research and Graduate Studies can be summarized as follows:

1. To consolidate the scientific research carried out by the faculty members.
2. To consolidate the scientific research carried out by the University students, particularly the postgraduate students.
3. To consolidate scientific research partnerships with the local public and private institutions or even international ones.
4. To consolidate scientific journals for publishing the accomplished research carried out by staff members of the University or even other affiliates.
5. To consolidate academic studies to support community development.
6. To administer and supervise the programs of higher studies and take part in their admissions and registration.
7. To provide all the required means and services required to support higher studies at the University.
8. To optimally and effectively invest and direct available funds towards scientific research and development.

To achieve the Deanship objectives, the following operational tasks have been specified;

1. Articulating research strategies, policies and operational targets.
2. Set-up an efficient and effective structure for the deanship
3. Establishment of research ethics procedures.
4. Establishment and update research web pages
5. Establishment of the Annual Distinguish Seminar series
6. Establishment of the Research Handbook.
7. Establishment of seminar series and workshops.
8. Set-up research monograph series and follow up issuing the ASU Journal.
9. Establishment of seminar series and workshops.
10. Running research development and support program.
11. Review MSc policies and guidance, choice of projects, issuing and assigning of projects, and involvement of external examiners.
12. Set-up of research groups and research centers.

3.3 Research and Innovation and Research Ethics Committees

The main functions of the Research and Innovation and Research Ethics Committees (RIRE) are:

- To devise and formulate policies related to all research and graduate studies matters that impact on the strategic objectives and direction of the University.
- To consider and make recommendations on matters of policies relating to research and graduate studies. These matters include those which are referred to it by the University Council and other University's committees.
- To receive and review the University's policies on research ethics.
- To monitor the relevance of established policies and address shortcomings and anomalies so as to facilitate high quality research and graduate studies activities within the University structure.
- To oversee quality assurance and improvement measures of research and graduate studies activities, including research and graduate studies quality measures.
- To review Annual Reports relating to research and graduate studies and to make recommendations to the University Council.

- To approve procedures for allocating research allowances/funds and monitor their implementation.
- To oversee the establishment and the implementation of the Annual Distinguished Seminar, and the Annual Research and Graduate Studies Handbook.

The RIRE committee shall operate under delegated authority from the University Council.

- The RIRE committee shall, through its members, act as a channel of communication between the University Council, research population of the University, and the administrations.
- On an annual basis, the RIC will review its own performance and its terms of reference and shall report its findings and recommendations for any changes to the University Council.

It is important that the RIRE committee is both effective and efficient in its operations and that should be reflected in the choice of its members.

To this end, the membership consists of:

- Dean of Research and Graduate Studies
- University President (Co-opted)
- VP - Academic
- A Research Coordinator from each College
- Deans of each College
- Director of Quality Assurance
- Secretary

The RIRE committee shall meet once at the start of each semester. This may increase depending on the need.

- The quorum for meetings shall be 51% of the members.
- An agenda shall be distributed ahead of each meeting and a call for extra items issued.
- Minutes of the RIREC shall be circulated to the University Council for either noting, discussion and/or decision as necessary.

Chapter Four

ASU Research Funding and Initiatives

4.1 Introduction

Encouraging scientific research is one of the most important objectives of the university. To this end, and to boost the intellectual and scientific tradition, the university offers the members of the faculty and students the use of facilities available to conduct research in their areas of interest. The use of the facilities should be through rules and regulations applicable to seek support for their research from the university or even from outside the university. In addition - and in support of the idea of formation of specialized scientific groups in the subjects, the university is funding some research by organizational rules by adopting policies and rules regulating the financial aspects.

Central to ASU research objectives is to invest strategically in research and continue to identify and establish priority areas for growth while consolidating our current research strengths.

The Bahraini government in its Vision 2030 document has identified priority industries and areas. The three highest priority areas of focus are:

- Financial Services, Islamic Banking & Finance, Insurance
- Health Services & Public Health, Gulf Region Health & Translational Medicine
- Information and Communications Technology (ICT)

To this end, we have established a number of initiatives to actively support our objectives. At the heart of these initiatives is the research funding that helps in the implementation of research projects and groups in a competitive manner to ensure a high level of quality and achieve maximum visibility both nationally and internationally.

4.2 Open and Responsive Calls for Research Proposals

Research projects can be a research project proposed by researchers offered through an open call to ASU staff - Open Call Project Proposals - or contractual projects - Responsive Call Proposals. With the forming of projects, the rationale is either to meet external demands (e.g. Industry needs or Government initiatives) and/or to further strengthen specific areas of

research excellence within the University. There are two distinct routes available to ASU staff to secure research funding. These routes are Open Call and Responsive Call and both routes are subject to a fair, independent, and confidential review process.

With Open Call, the University funds projects and, for this reason, it can be called a funded project. Any member of staff can apply for whatever amount of funding required. Application for funding can be made to cover a wide range of research activities, including;

- Full-edge research projects,
- Feasibility studies,
- Special-purpose equipment,
- Conferences/workshops travel and
- Research sabbaticals

These forms of projects are flexible in call and there are no closing dates, so any member of staff can apply at any time. However, proposals for conferences/ workshops should be made at the start of the academic year.

With responsive call, some research funds are directed to specific areas either proposed by external request or the University requirements. Within this mode, a call for proposal will be issued with a specified deadline.

A case-for-support should include the following: (Appendix (C)).

- A statement on the proposer's track record and achievements.
- Clear and precise research questions, together with motivation and background.
- Breakdown of research program into work-packages with clear tasks and time plan.
- Clear rationale for use of specialized equipment.
- Clear plan for effective dissemination of the research output.

For a sabbatical, the case-for-support document should include:

- A statement on the proposer's track record and achievements.
- Projected benefit to ASU and the applicant.
- Clear plan for elective dissemination of the outcomes of the sabbatical.

Applications for Conferences/Workshops will only be considered if it was originally approved at the projection phase procedure with the use of Application Form 'ASU-SR-PP'. Regarding projected publications, all members of staff are requested to complete their projected publication for the year, including both journals and conferences. This should be made on the form given in Application Form 'ASU-SR-PP'.

4.3 Procedure for Research Project Proposals

With open call research project proposals, the procedure is;

1. The researcher fills in the application form ASU-SR-01, indicating the available resources at the department and college and also the required resources. The form is submitted to the head of the department.
2. The department council passes the proposal to the Dean of the College if it meets the requirements mentioned in the guide (Appendix C).
3. The Dean passes the proposal to the college council to approve.
4. The college sends the approved proposal to the Deanship of Research and Graduate Studies to approve the proposal through the University Research and Innovation Committee. Having approved the proposal, the researcher can start conducting the research within the budget and timeline offered.
5. The researcher needs to provide the Deanship of Research a periodical progress report every three months.

With responsive call research project proposals, the mechanism is;

1. The deanship of research and graduate studies receives proposals from external initiators or from the University management in specific areas of research.
2. These proposals are studied by the research and innovation committee for approval and passed to the specialized college in the University.
3. The college forms a committee to study the proposal to make sure it is possible to be conducted at the college within the available resources and specified budget and time. A feasibility study is carried out and a report is issued to accept or reject the proposal. In case of rejection, a report should be sent to the external initiator showing the reasons for rejection.
4. When the acceptance to conduct the project is issued, a contract will be signed between the Deanship of Research and Graduate Studies and the external initiator if the project proposal received from outside university.
5. Next, the team will start implementing the project according to the schedule and issuing a periodical reports to the deanship of research about the progress.

4.4 Research Groups

A research group is a group of researchers with a variety of interface functions and experiences integrated together to give quality and intensity of research. Young researchers and postgraduate students can

be part of these groups for acquisition of skills and experience to ensure continuity. This enhances the excellence and creativity of researchers in all areas of knowledge and contribute to building the knowledge economy. From this standpoint, the idea of the establishment of research groups, means that the research is carried-out between a number of researchers for the purpose of completing outstanding research for the University and the community. The main objectives of the research group are:

- Support research interoperability among the disciplines
- Promote qualitative as well as quantitative scientific research
- Promote joint research enabled through the creation of a climate of interaction between researchers.
- Improve the capacity of new postgraduate students and new researchers' interests including serving sustainable development
- Support research partnerships with the public and private sector

It is a universally accepted wisdom that research groups are atomic structure that assists in the management and administration of research within an institution. Once a research group is established, groups will have prominence on the appropriate web pages of the institution, giving them more visibility. Research Institutes (RI) may then be formed from two or more groups. Two extra characteristics are added:

- (a) Groups within an RI collaborate to explore interdisciplinary issues.
- (b) RI is not an atomic research structure.

In their design, there should be no conflicts of interest between groups, allowing fruitful and seamless collaboration to strengthen the research culture. By their structure and nature, research groups carry resource implications which have to be carefully managed. This may be resolved by ring-fencing a percentage of the total university research budget which research groups can compete for. For example, 1.5% of the total research budget may be adequate to start with. In addition, in costing research, we may have to move towards a full economic costing model of funding.

4.4.1 Criteria for Establishing Research Groups

In order to avoid research groups proliferation and to enhance the external image of an institution, some control procedures over their establishment are needed. Below is a set of proposed criteria;

1. The group should have no less than 3 members, with one designated member as a group leader.
2. Members of the group need to be research active with strong research track records of at least the leader.
3. The group should have a clear and focused research aim and

direction that distinguishes it from other similar groups and an agenda with specific targets period.

4. Research groups carry resource implications which have to be carefully managed. Percentages of the total university research budget will be allocated to research groups to compete for.
5. The research agenda needs to be accompanied by an operational plan which includes external collaboration, business model, etc.
6. Each research group proposal needs to include research themes, targets, resource sharing plans, budget and period of support.
7. Each research group proposal need to be reviewed by the Research and Innovation Committee for approval.

4.4.2 Procedure for Forming a Research Group

1. The group leader calls for a research meeting to prepare a proposal and make sure that the proposal fulfills the research group criteria. The leader fills in the application form using the group registration form, ASU-SR-02, and submits it to the deanship of research.
2. The proposal will be forwarded to the RIREC for approval.
3. Once approved, the group starts working towards the proposed research and provides the intended KPIs from the project as specified in the proposal. These KPIs include publication in Scopus or ISI indexed journals for English written papers, and in Edusearch, Doaj, Al-Mareef and Al-Manheal for Arabic research written papers.

4.5 Art Exhibitions

Under this initiative, there will be two art exhibitions on an annual basis. One is for staff to display their work in the public arena, and the other is for student work. The chosen art work will be done on a competition basis. Details of the competition and their venues are announced at the beginning of the academic year.

Chapter Five

Applied Science University Journals

5.1 Introduction

The ASU Journal publishes papers covering all aspects of Applied Sciences and in particular core disciplines of the University. All articles (full length & short papers) should include a validation of the idea presented, e.g. through case studies, experiments, or systematic comparisons with other approaches already in practice.

ASU Journal is established such that:

- Submitted articles should not have been previously published or be currently under consideration for publication elsewhere.
- Conference papers may only be submitted if the paper has been completely re-written (taken to mean more than 50%) and the author has cleared any necessary permissions with the copyright owner, if it has been previously copyrighted.
- All papers are refereed through a double-blind process.

The journal welcomes state-of-the-art surveys and reports of practical experiences on topics of interest.

5.2 Frequency

Initially, ASJ will have three issues annually. This may change depending on how the journal evolves.

5.3 Controversy/Short Paper corner

The goal of the Controversy Corner is both to present information and to stimulate thought and discussion. Topics chosen for this coverage are not

just traditional formal discussions of research work; they also contain ideas at the fringes of the field's 'conventional wisdom'. Articles in this category will succeed only if they stimulate not just thought, but also action. They are classified as Short Papers. Special issues proposals can be issued based on proposals submitted to the ASJ. For a proposal for a special issue.

5.4 Preparation of Manuscripts

5.4.1 Formatting requirements

There are no strict formatting requirements, but all manuscripts must contain the essential elements needed, for example: abstract, keywords, introduction, materials and methods, results, conclusions, artwork and tables with captions. If your article includes any videos and/or other supplementary material, this should be included in your initial submission for peer review purposes. Divide the article into clearly defined sections.

Please ensure the figures and the tables included in the single file are placed next to the relevant text in the manuscript, rather than at the bottom or the top of the file.

5.4.2 References

There are no strict requirements on reference formatting on submission. References can be in any style or format as long as the style is consistent. Where applicable, author(s) name(s), journal title/book title, chapter title/article title, year of publication, volume number/book chapter and pagination must be included. Use of DOI is highly encouraged. The reference style used by the journal will be applied to the accepted article by Elsevier at the proof stage. Note that missing data will also be highlighted at the proof stage for the author to correct.

5.4.3 Use of word processing software

Regardless of the file format of the original submission, at revision you must provide us with an editable file of the entire article. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. The electronic text should be prepared in a way very similar to that of a conventional manuscript. To avoid unnecessary errors, you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

We strongly recommend you to use the Elsevier article class `elsarticle.cls` (<http://www.ctan.org/tex-archive/macros/latex/contrib/elsarticle>) to prepare your manuscript and BibTeX (<http://www.bibtex.org>) to generate your bibliography. For detailed submission instructions, templates and other information on LaTeX, see <http://www.elsevier.com/latex>.

5.5 Advisory and Editorial Boards

The Advisory Board (AB) of the Applied Science Journal (ASJ) has eight members, two of whom are external. Members are:

Dean of Research and Graduate Studies	(Chair)
VP – Academics	(Member)
VP - Administration and Community Engagement	(Member)
Dean of Law College	(Member)
Dean of Administrative Sciences College	(Member)
Dean of Art and Science College	(Member)
Two external scholars	(Member)

The external members are to serve on the Board for 3 years, which can be renewed for another term. The current external members are

Professor Jonathan Blackledge - SFI Stokes Professor, DTI (Ireland) and VP (Research), University of KwaZulu-Natal, Westville (South Africa).

Professor George Tovestiga - Henley Business School, Reading University (UK)

The AB Terms of Reference are:

- Articulate policies and procedures that govern the operations of ASJ.
- Decide on the technical direction of ASJ, and determine the main sub-discipline of each issue.
- Appoint an Editor-in-Chief for each issue.
- Approve the Editorial Board (EB) for each issue, who is nominated by its Editor-in-Chief.
- Continually monitor statistics such as readership volume, impact factor, citation, etc.

The EB is formed for each issue of the journal and headed by an Editor-in-Chief. The board members are senior scholars and experienced researchers in their field. Their responsibilities are;

- receive manuscripts from authors,
- oversee the correct implementation of the refereeing process, and
- decide, with the Editor-in-Chief, on the selection of papers to be included in the issue.

Chapter Six

Research Ethics

6.1 Background

The University recognizes and acknowledges the importance of research ethics and has set up a comprehensive set of policies and procedures to deal with the protection of individuals who are the subjects of research (including undergraduate activities). The University has established the Research, Innovation and Research Ethics Committee (RIRC) to provide rules and policies and supervision of the implementation of these rules through the colleges and Deanship of Research and Graduate Studies. This Committee reports annually to the University Council on such issues.

Research ethics range from intellectual property, plagiarism, research misconduct to human research ethics. Thus, it is essential for ASU the RIREC committee and the Deanship of Research and Graduate Studies and colleges to assure that all members of ASU involved in research considers such aspects.

This chapter provides key principles and requirements of what we regard as good practice ethical review of research at the University. It was developed as a result of a literature review of the guidelines, criteria, and best international practices of leading universities in research ethics. This involves the definition and dissemination of the main ethics values, together with the rules to implement such practice, together with intellectual property protection and anti-plagiarism.

The most important goal of this chapter is to prevent any possible occurrence of research misconduct with an ultimate objective to protect the academic reputation of the university because of the serious impact it has on the University. Therefore, the main role of the duties of the Deanship of Research and Graduate Studies together with the RIRE committee is to raise awareness among all persons involved in scientific research at the university about research ethics since many of the incidents of research misconduct are due to lack of knowledge about these rules, or to insufficient understanding of the nature and concepts of research ethics by researchers, students, research administrators and collaborators in certain research issues.

6.2 Essentials Research Ethics, Values and Practices

The following are the most important values related to ethical research that should be addressed for all research conducted at the University;

1. **Honesty:** Honesty needs to be assured in all scientific communications without any fabrication, falsifications or misprinted data. This should be assured in reports, data, results, methods and procedures, and publication status.
2. **Integrity:** Consistency of thought and action throughout the research must be assured.
3. **Objectivity:** In all aspects of research: research, experimental design, data analysis and interpretation, review, etc bias must be avoided.
4. **Accuracy:** Care must be taken to avoid errors and negligence. Good records of research activities, such as data collection, research design, and correspondence with agencies or journals need to be assured and maintained.
5. **Openness:** Be open to criticism and new ideas by sharing your data, results, ideas, tools, resources with peers to allow outcomes and contribution revision.
6. **Research freedom:** The researcher has the right to freely select research topics along with the right to use relevant methodology,
7. **Respect for Intellectual Property:** Do not use unpublished data, methods, or results without permission and proper acknowledgement and do not plagiarize.
8. **Confidentiality:** Confidential communications, such as personnel records, trade or military secrets, and patient records should not be shown to the public.
9. **Mentoring:** Help to educate and advise students. Promote their welfare and allow them to make their own decisions.
10. **Respect for colleagues and Social Responsibility:** Respect your colleagues and treat them fairly.
11. **Competence:** Promote competence in science to improve your own professional and expertise through lifelong education and learning.
12. **Legality:** Know and follow relevant laws related to institutional and governmental policies regarding scientific research.

6.3 General Rules Governing Research Ethics

Having identified and defined the research ethics values and practices, the University imposes the following rules that should be adopted by all the researchers at the University. These rules are;

1. Researchers and participants should be educated and aware of research ethics. The University represented by the Deanship of the Research and Graduate Studies through the research handbook and research website together with research workshops, colleges, and supervisors should ensure this education and awareness.
2. The University through the Deanship of Research and colleges should ensure that the values of honesty, integrity, fairness, transparency and

equal opportunities among all persons involved in research at the university are in place and respected.

3. Assure the implementation of the research ethics of through any research activities. This suggests that responsibility and accountability among all persons involved in research at the University should be the responsibility of all members of staff, students involved in research and participants.
4. Any ethical misconduct by researchers, students, or others should reported and disclosed.
5. Enhance the University's reputation through the implementation of international research ethics practices.

6.4 Intellectual Property

Through the ASU bylaws, authors' rights to their literary or artistic works are protected, particularly for the following works:

1. Books, brochures, articles, circulations and other written works.
2. Databases and software, whether they are written or read by a computer or other equipment.
3. Lectures and any other works that have been recorded.
4. Drawings, including line drawings, drawings, and printed drawings.
5. Design-related works (architecture, interior design, graphic design, fashion, industrial design, etc.).
6. Plastic arts and artistic works (painting, ceramics, sculpture, etc.).
7. Photographic works and their equivalent.
8. Illustrative pictures, maps and diagrams (sketches) and tri-dimensional works related to geography or architectural design.

However, the protection does not include the following:

1. Ideas, procedures, work methods, operational approaches, concepts and principles.
2. Official documents, whether in their original language or a language into which they have been translated, such as laws, regulations, decisions, international conventions, judicial judgments, awards by arbitrators and decisions issued under the jurisdiction of the proper administrative committee.
3. News reported by the press on incidents and current events.
4. National folklore, which is considered the property of the public since the relevant ministry shall assume the literary and financial rights of the author and work on protecting and supporting him or her.

If more than one person has taken part in composing a work, all participants shall be considered equal authors of the work, unless they otherwise agree this in writing. In this case, none of them may fully assume

the author's rights by himself or herself, except by a written agreement among them. Each shall have the right to instigate action upon violation of any author's rights. If one of the participants dies without designating a successor, his or her share shall be given to the remaining participants or their successors, unless otherwise agreed in writing.

The victim shall bring the matter of any transgression regarding his or her work to the attention of the college Dean, who shall raise it with the University President. The latter, in turn, shall refer it to the chairman of the relevant court that has jurisdiction to hear the original dispute, based on the claim of the victim, in order to follow the proper procedures. Thus, upon violation of any of the rights provided for in this bylaw, the claimant in the original dispute shall refer the matter to the court within fifteen days from the date the order is issued by the University President. This matter shall be applied to whoever commits any of the following actions:

1. Selling or hiring of a protected work, pursuant to the provisions of this bylaw, or putting it into circulation in any form without prior permission, in writing, from the author or the owner of the related rights.
2. Counterfeiting a work, offering a counterfeited work for sale, or circulating or lending the work whilst knowing it is a counterfeit.
3. Imitating/plagiarizing a published work in another work, offering the imitation/plagiarised work for sale, or circulating or lending the work whilst knowing it is an imitation/plagiarism.
4. Publishing a protected work, pursuant to the provisions of this bylaw, through computers, online networks, information or communication networks, or other means of network connectivity without prior permission in writing from the author or the owner of the related rights.
5. Transgressing any of the literary or financial rights of the author, or the associated rights provided for in these bylaws, for which there shall be several different penalties depending on the type of crime committed.

6.5 Plagiarism

Plagiarism can be defined as; 'The incorporation of another's work in an assessment without proper acknowledgement'.

ASU established policies (The Academic Misconduct and Plagiarism Policy and Examination Rules and Regulations) that assure avoidance of plagiarism misconduct. These policies are for students and academic staff to follow. Plagiarism can occur in varying degrees, and examples of such occurrences are as follows:

- The inclusion in a student's work of more than a single phrase from another's work without the use of quotation marks and acknowledgement of the sources.
- The summarizing of another's work by simply changing a few words or altering the order of presentation without acknowledgement.

- Reproducing another person's work or ideas in a student's own words without acknowledgement.
- The unauthorized use of the ideas of another person without acknowledgement of the source.
- Copying the work of another student, with or without the student's knowledge or agreement.
- Submitting work which is in whole or part identical to work already submitted by that student for another assignment.
- Commissioning of a piece of work prepared by one or more others but submitted by the student as if it was their own.
- Purchase of another's work from any source.

Proper acknowledgement means that when a student is copying from another source, that section must appear in quotation marks with an acknowledgement of the source by the provision of a detailed reference and page number. Where the student is reproducing someone's ideas, but in their own words to a greater or lesser extent (or paraphrasing), the student must cite the original source and, in the case of direct quotes, include the page number. If the student is in any doubt as to how to reference material, they must consult their Academic Advisor.

1. The University will allow both students and staff the opportunity to make use of software designed to detect the possibility of plagiarism.
2. The University accepts that such software does not itself prove plagiarism, nor will any single piece of software deal with all types of plagiarism. The software provides information on which judgements have to be made within the existing Policy relating to Academic Misconduct.
3. Providing students with the opportunity to make use of e-detection software at an early stage of their learning career and allowing them to make such use thereafter as they wish, is an important part of the process of educating students as to the nature of academic misconduct and in helping them to avoid it.
4. Colleges must identify at least one course early on in a student's study career where, as part of the course, students will use Turnitin, or such other e-detection software that a College considers appropriate, on an individual or group basis.
5. The student must be provided with guidance on how they can access such software and also on how to avoid academic misconduct.
6. Particular attention must be paid to the needs of postgraduate students studying at the University for the first time. The intention will be to identify good practice in the avoidance of academic misconduct and to ensure that students are sufficiently familiar with e-detection software to allow them to make use of it subsequently to check their own work.

7. Colleges must decide where else, if anywhere, in a student's program of study they wish to either make the use of e-detection software a requirement or, alternatively, strongly recommend its use by students.
8. Master's dissertations and master's reports, project graduation reports, internship reports and summative course-work reports should be subject to e-detection software use.
9. Colleges must identify any specific courses where the use of e-detection software should become routine. Colleges may also decide, from time-to-time, to target specific courses, either as regards all assessed work or via a sampling process. Any suspected cases of plagiarism picked up as a result of such a targeted campaign will be dealt with via the regulations relating to academic misconduct. Over and above this, staff may make use of e-detection software as they wish. Colleges must periodically review the intensity of staff usage, with a view to making recommendations on consistency.
10. Students must be reminded from time-to-time that they are encouraged to make use of e-detection software if they so wish, and that staff will make use of it on an ongoing basis.

6.6 Human Research Ethics

Human research is any research that is conducted with or about people, or their data. This type of research may raise some ethical issues that can be generally described as:

1. Issues raised when the research conducted involves the interests and rights of others. In such type of research, people act as subjects and threats to the participants' safety, comfort or convenience may occur.
2. Research that requires the researcher to observe and protect the participants' rights and to permit the participants to exercise those rights.
3. Ethical issues raised by research which makes reference to named persons either living or dead with living relatives..
4. Any research that involves others as participants creates the possibility of an invasion of the participants' interests or rights.
5. Social research involving interviewing or observation, are kept, may impinge on the confidentiality, privacy, convenience, comfort or safety of others. Such threats constitute ethical problems.

The above illustrations indicate that a great deal of work conducted by students and staff in science, social science and professional disciplines will inevitably raise ethical issues. Such work is not limited to research. A significant element of the education of professionals, whether it be pre-or in-service, involves working with others. It therefore involves a systematic regard for the rights and interest of those others as they may be affected by the professional relationship.

Ethical practice in the management of this work requires that a body independent of the research team examine the research design and the system for protecting participants' interests with a view to adjudicating on their ethical acceptability

and their accountability.

In all of the above respects, the University has the responsibility for ensuring that ethical practices are followed and ethical principles are explicitly taught where appropriate. Thus, it is necessary that members of the University proposing to engage in any of the activities listed below gain approval for such activity before it begins from the college Dean. Approval must be gained by members of the University, both staff and students, who wish to engage in research whether at postgraduate or undergraduate level using the **Ethical review procedures Form ASU-SR-03**, by:

- (a) Gathering information about human beings (and organizations) through:
 - interviewing
 - surveying
 - questionnaires
 - observation of human behavior
 - interfering in normal physiological and / or psychological processes
- (b) Using archived data in which individuals are identifiable.
- (c) Researching into illegal activities.

Appendix A

Research and Publications Quality

A-1 Research Quality Components

Research output reports advances in either basic, applied, practice-based or interdisciplinary research. There are three components to quality of research outputs. These are originality, significance and rigour. Each can be defined as follows:

- **Originality** is understood as the extent to which the output introduces a new way of thinking about a subject, or is distinctive or transformative compared with previous work in an academic field.
- **Significance** is understood as the extent to which the work has exerted, or is likely to exert, a significant influence on an academic field or practical applications.
- **Rigour** is understood as the extent to which the purpose of the work is clearly articulated, an appropriate methodology for the research area has been adopted, and compelling evidence presented to show that the purpose has been achieved.

Each research output is therefore ranked according to these components. The scale of ranks do vary but after extensive study and over 20 years' experience, the UK Government has adopted a 5-point scale:

- *Four star*: Quality that is world-leading in terms of originality, significance and rigour.
- *Three star*: Quality that is internationally excellent in

terms of originality, significance and rigour but which falls short of the highest standards of excellence.

- *Two star*: Quality that is recognized internationally in terms of originality, significance and rigour.
- *One star*: Quality that is recognized nationally in terms of originality, significance and rigour.
- *Unclassified*: Quality: that falls below the standard of nationally recognized work. Or work which does not meet the published definition of research for the purposes of this assessment.

Mapping between the UK-based 5-point scale and ASU-based 3-point scale has variation. For example, one such example could be:

- C = Unclassified or 1*
- B = 2*
- A = 3*/4*

The Deanship of Research and Graduate Studies can only offer a general framework within which such a mapping can be formulated within each college. Indeed, each collage, after wide consultation, must publish their working method for performing such a mapping.

A-2 Impact factor

The Journal, Impact Factor, is published each year by Thomson Reuters. It is a measure of the number of times an average paper in a particular journal is cited during the preceding two years. For example, let:

- *A = the number of times articles published in a specific journal in 2009 and 2010 were cited by journals during 2011.*
- *B = the total number of 'Citable items' published by that journal in 2009 and 2010.*

(*'Citable items'* are usually articles, reviews, proceedings, etc.; not editorials or letters-to-the-editor.)

Then:
2011 **impact factor** = A/B .

All journals display an actual value for the most recent year. Earlier values can be obtained from the Journal Citation Reports from Thomson Reuters.

ISI ranking

Journals are often ranked by impact factor in an appropriate Thomson Reuters subject category. As there are now two published impact factors, this rank may be different when using a two or a five year impact factor and care is needed when assessing these ranked lists to understand which metric is being utilized. In addition, journals can be categorized in multiple subject categories, which will cause their rank to be different per subject and consequently a rank should always be in context to the subject category.

Five Year IF

A base of five years may be more appropriate for journals in certain fields because the body of citations may not be large enough to make reasonable reasons, or it may take longer than

two years to publish and distribute leading to a longer period before others cite the work.

A.3 Article influence

Article Influence is calculated by dividing the Eigenfactor^o score by the percentage of all articles recorded in the Journal Citation Reports that were published in a specific journal. The Eigenfactor^o score is a rating of the total importance of a specific journal. Journals are rated according to the number of incoming citations, with citations from highly ranked journals weighted to make a larger contribution to the Eigenfactor^o than those from poorly ranked journals. The Eigenfactor^o approach is thought to be more robust than the Impact Factor metric, which purely counts incoming citations without considering the significance of those citations. Article influence and Eigenfactor^o exclude self-citations. Article Influence score measures the average influence, per article, of the papers in a journal. As such, it is comparable to Thomson Scientific's widely-used Impact Factor.

A.4 Guidance on the selection of Journal publisher

It is recommended for authors before publishing their finding is to use metrics when deciding where to publish. The essential idea is to assign weights to bibliographic citations based on the importance of the journals that issued them. Citations issued by more important journals will be more valuable than those issued by less important ones. This 'importance' will be computed recursively, i.e., the important journals will be those, which in turn receive many citations from other important journals.

There are several reasons why an author will choose a particular journal to submit to. Probably one of the most important reasons is the quality or impact of the journal. Journal Insights defines impact by several metrics, which are statistically sound and provide authors with valuable information to support their selection.

As an example, that enlists the ranking of journals for all disciplines can be found through Thomson Reuter with the impact factor for each journal. However, a better guide to journals and conferences for all disciplines, together with Arabic based publications, can found in almost all higher education authorities in the Arab countries. One example of such reference is the Jordanian University in Amman. Excellent information that is very helpful for ASU staff can be found through the Jordanian University website;

http://ju.edu.jo/ar/arabic/Research/Lists/Accredited%20Journals/All_Items.aspx

Another important classificationis also conducted by the Egyptian Supreme Council of Universities that lists accredited journals for academic promotion in all subjects on the following link:

<http://www.scu.eun.eg/wps/portal>

Finally, the link below also gives a list of accredited journals for the promotion by the University of Baghdad:

<http://jcomc.uobaghdad.edu.iq/PageViewer.aspx?id=28>

We hope that the information available from on the Jordanian University, the Egyptian Supreme Council of Universities, the—University of Baghdad and other universities will be useful for all ASU authors when considering the submission of their papers.

Appendix (B)

ASU Research Bylaws and Roadmap

B1- ASU Research Bylaws

Article (1):

This list is called “Regulations for Scientific Research at Applied Science University” and is implemented from the date of approval.

Article (2):

1. Scientific research is defined as every effort contributing to the development of human knowledge as a result of individual and/or joint, and its support through various physical, moral, and human means in accordance with the provisions of these regulations.
2. Principal Researcher is a faculty member who represents the joint research group he/she participated in.
3. Joint Researcher is a faculty member who is participating in a research or study with a group of researchers.

Article (3):

The Deanship forms a committee called the ‘Scientific Committee’ which includes the following:

1. The Dean of Scientific Research/Chair.
2. Four faculty members selected by the University Council upon the recommendation of the Dean of Scientific Research for a period of two years, subject to renewal.
3. Two members from outside the university with experience in scientific research selected by the University Council upon the recommendation of the Dean of Scientific Research for a period of one year, subject to renewal.

Article (4):

The Dean of Scientific Research undertakes the following

responsibilities:

1. Implement the policy of scientific research at the university and regulate the affairs of supporting, encouraging, supervising and coordinating the preparation of the annual research plan for the University.
2. Prepare the annual budget for scientific research.
3. Seek to find sources of funding for scientific research from inside and outside the Kingdom.
4. Collect information on scientific research projects inside and outside the university and their follow-up.
5. Manage the Deanship of Scientific Research, chair the Scientific Research Committee at the university and oversee the various activities of the Deanship (technical and administrative).
6. Supervise the work of the research centers upon their creation, follow-up their activities, and assess their performance and coordinate with other institutions and research centers locally and in the Gulf region.
7. Coordinate with the Deans of the colleges in all that is related to the completion of the graduate students' research in terms of following-up or providing them with physical and moral means of support and assure the presence of? conditions for supervision.

Article (5):

The Committee has the following powers and functions:

1. Prepare a draft of the scientific research plan and means of its implementation.
2. Lay down the foundations for scholarships and coordinate with other bodies relevant to scientific research.

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3. Consider scientific research projects and their approval.
4. Discuss and propose the annual budget for scientific research.
5. Follow-up the annual report of the Deanship of Scientific Research.
6. Consider composed and translated books after their evaluation and guide to support their publishing.
7. Prepare internal and external scientific indicators.
8. Propose regulations, rules and procedures governing the driving of scientific research at the university.
9. Approve research projects and studies and follow-up their implementation, disbursement and arbitration and recommend them according to the rules governing them in the university.

10. Any other matters.

Article (6):

The President of the University, upon a recommendation from the Scientific Committee and based on a recommendation from the College Council and the relevant Department Council, may agree to wholly or partially relieve or unload a faculty member at the university to work in a particular research project.

Article (7):

Every college of the university forms a committee called the 'Scientific Committee' upon a decision by the College Council or the Department Council, as appropriate, where these committees handle scientific research affairs, each according to their specialization.

Article (8):

The university issues a scientific journal called 'Applied Science University Journal' where every issue relates to a specific specialization within the university.

Article (9):

When a Research Development Center is formed, it is managed by:

1. The Centre's Council.
2. The Centre's Director.
(All within their jurisdiction)
3. The Director of the center upon a nomination from the Dean of Scientific Research and Graduate Studies and a decision from the President may appoint a faculty member who is treated as the head of the scientific department.
4. The Centre Council constitutes the Director as the Chair and four faculty members known for their research. It is formed upon a nomination from the Dean of Scientific Research and Graduate Studies and a decision from the President of the University.
5. The Centre Council shall consider all that relates to the Center's research and technical affairs and prepare an annual research plan and budget estimates.
6. The Council considers all that relates to it by the Scientific Committee of the Deanship of Scientific Research and Graduate Studies.

Article (10):

The following are rewarded according to ~~from~~ the financial regulations issued by the university in this regard and upon a recommendation from the Scientific Committee:

1. Composed Books.
2. Published research in accordance with the classification of magazines (local – regional – local).
3. Published research in scientific conferences (local – regional – global).
4. Publish Master Dissertations.
5. Translated Books.
6. Articles published in newspapers.

Article (11):

The President of the University issues the instructions necessary to implement the provisions of these regulations to ensure the ethics of scientific research and its customs.

Article (12):

The President of the University, the Vice-Presidents, the president's assistants, and the deans are responsible for implementing the provisions of these regulations.

B2- Deanship of Research Roadmap and Overriding Objectives

We briefly detail tasks (T) and their progress (P) which will be constantly reviewed. Thus, this roadmap is organic in nature as it will continually evolve, be modified and improved. The overriding objectives of the Deanship are:

- Increase the visibility of the research and graduate studies of ASU both nationally and internationally
- Build a sustainable research culture within which research activities can be conducted, flourish, and continually improve.

To this end, the following operational tasks are necessary to achieve these overall objectives.

T 1. Articulating Research Strategies, Policies and Operational Targets.

P 1. These must be realistic, attainable and must take into account the current national research thinking, frameworks and

philosophy. For example, some aspects of a UK-based targets will not be advisable in any Bahrain academic institution. See Sections (1.3, 2 & 3)

T 2. Set-up an Efficient and Effective Structure for the Deanship

P 2. The structure of the Deanship must be effective, allowing a seamless two-way dissemination of information with University staff in a timely fashion. To this end, and following best practices:

- Each college will have a Research & Postgraduate Coordinator (RPC) who should have a good grasp of the research interests and activities within his/her college.
- Establish an effective and efficient Research and Graduate Studies Committee whose memberships and terms of reference will be articulated and widely distributed. The terms of reference must ensure that the work of the committee falls within the boundaries and the responsibilities of the University Council. The committee will meet (initially) once a semester. Dates of these meetings will be set at the beginning of each academic year. These meetings will be recorded and their minutes will be presented to the University Council.

T 3. Establishment of Research Ethics Procedures.

P 3. It is fundamental that the Deanship oversees that all

our R&D activities, from student projects in the taught programs (both at undergraduate and postgraduate levels) to research conducted by staff, follows ethical procedures and that ethical reviews are undertaken before proceeding.

For ethical compliance to be accepted and be effective, a procedure must be developed which takes into account the severity of the ethical issues.

A code of Best Practice for Research has been established.

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T 4. Establishment of maintainable Research Web Pages and Repository

P 4. Having an appealing and informative presence on the web that reflects the vitality of our research (its impact and esteem) and our wide ranging graduate programs is fundamental. With the IT Department, work has already begun. We now have an initial design for a corporate and unified style for all staff web pages. These will be disseminated to staff for their views.

Central to web presence is the establishment of a University-wide research repository. This will increase our research visibility both nationally and internationally. This repository aims to store all our research outputs and their impact. In addition, it will be an important tool for managing research and guiding our strategic decisions.

Work on this has started by drawing up initial requirements, exploring if it can be built in-house, and considering its resource implication.

T 5. The Establishment of the Annual Distinguish Seminar Series

P 5. World-leading key scholars will be invited for 2-3 days to deliver keynote lectures in their disciplines, outlining their vision for the future and giving a road-map for research and development in the (sub-) discipline. This will give staff an opportunity to interact and collaborate with key scholars in their field - see Section(H).

T 6. The Establishment of Research Handbook

P 6. Annually, a research handbook will be edited, published and distributed widely to key government departments, organizations, decision makers and colleagues.

The Handbook will contain our policies, achievements, profiles of key staff and also case-studies of our bright graduate students. News of the impacts and esteem of our research findings will also be included as well as manuscripts of key research outputs. There will be an editorial board to oversee its compilation and a distribution list.

T 7. Set-up Research Monographs Series and ASU Journal.

P 7. A monograph series will be established and published by the university. Each monograph will report research findings before they are finally published in learned journals and workshops. It will be widely distributed to scholars and colleagues, seeking opinions. This will give our research wider initial exposure and also facilitate collaboration within and outside ASU.

T 8. Hosting and Organizing International Conferences/Workshops.

P 8. ASU will host a number of International Conferences/Workshops, for example, IEEE/ACM series in Engineering, Computing, Information Systems, etc. These organizations will under-write the cost but will help greatly in increasing our visibility and standing on the international scene. We are already holding discussions to host the forthcoming IEEE Workshop on Future Trends in Computing for the Software Evolution and Creative Technologies Conferences.

T 9. The Establishment of Seminar series

P 9. Staff will be encouraged to establish local/departmental seminar series that help to create a local research culture and enhance collaboration.

T 10. Research Development and Support Program

P 10. Individual research plans will be established to support and further develop research-active staff. Specific support may include, but is not limited to (see Section 5):

- The introduction of research allowances to give time to undertake high quality research.
- Establish a variety of competitive research support to help staff develop their research careers. This may include a Revolving

Investment Fund to support new initiatives, to build our research capacity, performance and reputation, and The President's Future Research Leaders' Program to raise the strategic research competence of a cohort of selected 'future research leaders' within the University by equipping them with the skills and the sense of responsibility to act subsequently as champions and inspirations of research in their own departments and Colleges

- A Colleges Research Away Day to allow staff to meet colleagues in the collage with the aim to encourage new internal research collaboration activities and links.

T11. Review MSc policies, guidance and recruitment, choice of projects, examinations, issuing and assigning of projects, involvement of external examiners.

P 11. This has many dimensions:

- Review existing policies and procedures and make appropriate recommendations.
- Clarify the processes of issuing projects to students, the assignment supervisory team and the continual monitoring of their progress.
- Publish an annual handbook with all abstracts of completed theses. This publication will be distributed widely at a national level.

T12. Establish a series of induction open lectures.

P 12. This is a series of induction talks which are open to all staff.

T 13. Set-up the Centre of Excellence of Homeland Security.

P 13. Homeland security has become an active area of research and development. It has the great advantage of being a truly multi- and

inter-disciplinary activity. It brings experts from technology, engineering, economics to policy makers and lawyers?.

Professor Blackledge (Dublin Institute of Technology, Ireland) will be visiting us for 2-3 days to discuss collaboration and setting up such a centre within ASU and across national boundaries within the Gulf region.

Appendix C

Criteria for Judging Case-for-Support

Case for-Support are evaluated according to the following criteria. It is important to address these criteria directly. A proposal which fails to meet them will be rejected regardless of the quality of its source.

C.1 Major criteria

Here are the major criteria against which your proposal will be judged.

- Does the proposal address a well-formulated problem?
- Is it a research problem, or is it just a routine application of known techniques?
- Is it an important problem, and will its solution will have useful effects?
- Is special funding necessary to solve the problem, or to solve it quickly enough, or could it be solved using the resources available in the college?
- Do the proposers have a good idea on which to base their work? The proposal must explain the idea in sufficient detail to convince the

reader that the idea has some substance; it should explain why there is reason to believe that it is indeed a good idea. It is not enough merely to identify a wish-list of desirable goals. There must be significant technical substance to the proposal.

- Does the proposal explain clearly what work will be done? Does it explain what results are expected, and how they will be evaluated? How is it possible to judge whether the work is successful?
- Is there evidence that the proposers know about the work that others have done on the problem? This evidence may take the form of a short review as well as representative references.
- Do the proposers have a good track record, both of doing good research and of publishing it? A representative selection of relevant publications by the proposers should be cited. Absence of a track record is clearly not a disqualifying characteristic, especially in the case of young researchers, but a consistent failure to publish raises question marks.

C.2 Secondary criteria

Some secondary criteria may be applied to separate closely-matched proposals.

- An applicant with little existing funding may deserve to be placed ahead of a well-funded one. On the other

hand, existing funding provides evidence of a good track record.

- There is merit in funding a proposal to keep a strong collaborative research team together; but it is also important to give priority to new researchers in the field.
- An attempt is made to maintain a reasonable balance between different research areas, where this is possible.

- Evidence of external (e.g. industry) interest in a proposal, and of its potential for future exploitation will usually count in its favor. The closer the research is to producing a product/artefact the more industrial involvement is required and this should usually include some industry contribution to the project. The case for support should include some ‘route to market’ plan, i.e. you should have thought about how the research will eventually become a product — identifying an industry partner is usually part of such a plan.

C.3 Some shortcomings

Here are some of the ways in which proposals often fail to meet these criteria.

- It is not clear what question is being addressed by the proposal. In particular, it is not clear what the outcome of the research might be, or what would constitute success or failure. It is vital to discuss what contribution to human knowledge would be made by the research.
- The question being addressed is ill-formed. The reviewers are looking for evidence of clear thinking both in the formulation of the problem and in the planned approach to it.
- It is not clear why the question is worth addressing. The proposal must be well motivated.
- The proposal is just a routine application of known techniques.

- Industry ought to be doing it instead. If the work is ‘near market’ then it should be done by industry or venture capital should be funding it.
- There is no evidence that the proposers will succeed where others have failed. It is easy enough to write a proposal with an exciting-sounding wish-list of hoped-for achievements, but you must substantiate your goals with solid evidence of why you have a good chance of achieving them. This evidence generally takes two main forms:

- "We have an idea". In this case, the proposer should sketch the idea, and describe preliminary work which he/she has done which shows that it is indeed a good idea. The proposer is unlikely to get funding without such evidence. It is not good to say: "give us the money and we will start thinking about this problem".
 - "We have a good track record". Include a selective list of publications, and perhaps include a short paper (preferably a published one) which gives more background, as an appendix.
- A new idea is claimed but insufficient technical details of the idea are given for the reviewers to be able to judge whether it looks promising.
- The proposers seem unaware of related research. Related work must be mentioned, if only to be dismissed. Otherwise, the reviewers will think that the proposers are ill informed and, therefore, not the best group to fund. The case for support should have a list of references like any paper, and you should look at it to check it has a balanced feel.
- The proposed research has already been done - or appears to have been done. Rival solutions must be discussed and their inadequacies revealed.
- The proposal is badly presented, or incomprehensible to all but an expert in the field.
- The proposers seem to be attempting too much for the funding requested and time-scale envisaged. Such a lack of

realism may reflect a poor understanding of the problem or poor research methodology.

- The proposal is too expensive for the probable gain. If it is easy to see how to reduce the costs of equipment/travel etc. to something more reasonable, then it might be awarded in reduced form. More likely, it will be rejected.

Appendix D

Coordinators - 2016/17

The following table lists the current coordinators in all Colleges.

College	Name	Responsibility
Admin Sciences	Dr. Hussien Khasharma	Assistant Dean of Research and Graduate Studies
	Dr. Omar Khairi	Research Coordinator
	Dr. Hussien Khasharma	Graduate Studies Coordinator
Law	Dr. Naseim Sherawra	Research Coordinator
	Dr. Mohaned Al Sanory	Graduate Studies Coordinator
Art and Science	Dr. Udai Aljoburi	Research Coordinator

AppendixE

Annual Distinguished Seminar Series

E.1 Aim

The Annual Distinguished Seminar (ADS) Series aims to

- help create a strong and sustainable research culture across the University
- Increase the visibility of our research activities both nationally and internationally.

The recipients of the ADS are world-leading scholars who help in defining the research agenda in their field and continue to shape its development. Being top researchers, the impact of their development and innovation can be seen in industries and governments and policy makers. In addition to giving a keynote seminar, an ADS recipient also conducts a number of master-classes with our researchers in the field in a more focused fashion. The aim of these master-classes is to encourage collaboration at international level.

E.2 Recipients

- **April 2014**, Professor George Tovstiga (Henley Business School, University of Reading, UK)
- **December 2014**, Professor Mark Batey (Head of Open Global Programmes Manchester Business School, UK)
- **December 2015**, Professor Jonathan Blackledge (Deputy Vice-Chancellor for Research at the University of KwaZulu-Natal, South Africa). ADS: Energy Trading and Economic Security, Master Class; Homeland Security: Research and Development

Appendix F

Forms

- ASU – SR – 01 (Project Proposal Form)
- ASU – SR – 02 (Group Proposal Form)
- ASU – SR – 03 (Ethical Review Procedures Form)
- ASU – SR – 04 (Publication Projection Plan Form)