The NDU Gazette

A publication covering decisions taken at the BOD and UC meetings

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BOD

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DECISIONS

Issue Number ONE, July 2013

Non-Smoking Policy

Approved by the UC on June 17, 2013

Rationale

Since the University is committed to protecting the health and well being of individuals on campus premises, and in view of the health hazard and safety risks associated with smoking and passive smoking, NDU-Louaize, in compliance with the Lebanese Law number 174, is committed to the following non-smoking policy.

Policy

1- In accordance with the Non-Smoking Lebanese Law (# 174, Aug. 29th, 2011, Chapter 1, Article 1 "Enclosed Public Places"[1]), smoking is prohibited on all NDU campuses, within facilities, and in all NDU vehicles.
   a. Smoking is not allowed in buildings, closed areas, and outdoor spaces.
   b. Smoking is prohibited in all vehicles owned by or operated by the University.
2- The non-smoking policy applies to all members of the NDU community as well as all guests and visitors of the University.
3- No advertisements or sponsorship from any tobacco-related company are allowed on campus.

Implementation

1- Some areas will temporarily be designated as "smoking areas", until September 1st, 2014. In the hope that smokers (faculty, staff, or students) will seek the needed help to quit smoking on campus. Appendix A shows a map of these temporary smoking designated areas.
2- It is the responsibility of all members of the University community to observe the non-smoking policy. All members are encouraged to report smoking violations to security personnel on campus, extension 2222 or 2252, or email: controlroom@ndu.edu.lb.
3- The security personnel on campus are in charge of monitoring the implementation of the policy among faculty members, staff members, students and visitors. Violators of the policy will be reported by the security personnel to the office of the VPAA (faculty members), the Office of Administration (staff members & visitors) or the SAO (students), as appropriate.
4- Violators of the policy will be subject to disciplinary actions that are part of the administrative record. Repeated offenses may culminate in expulsion from the University.

[1] Lebanese Law # 174, Aug. 29th, 2011, Chapter 1, Article 1, (Enclosed Public Places): "Are considered as well as enclosed public places, all institutions of health, education and sports with all their opened and enclosed annexes.

Amended Attendance Policy

Approved by the BOD on June 13, 2012
Approved by the UC on November 5, 2012

Students should attend all classes. A pattern of absences may affect a student's grade substantially. ***The Class Instructor, in full coordination with the Department Chair, is the direct authority responsible for the implementation of the Attendance Policy. The SAO only validates absences related to University events, travel, or medical excuses upon need and only when requested by the Department Chair.*** The Student is responsible for the material presented during his/her absence. The maximum number of absences for classes that meet on MWF is six and for those that meet TTH and in Summer is four, (or two hours per credit course). Any student whose absences exceed the maximum limits shall automatically be unofficially withdrawn from the course, unless he or she withdraws.

University Research Board
Policy on Ethics in Research

Approved by the BOD on April 10, 2013
Approved by the UC on June 25, 2013

I. Introduction and Purpose

Congruent with the Mission of Notre Dame University–Louaize (NDU), which promotes "*excellence in scholarship, lifelong learning, human dignity, and moral integrity*", the Policy on Ethics in Research is set to protect the rights, dignity, welfare, and privacy of both human and non-human subjects, and to protect the environment, in all research that involves the University. Its ultimate goal is to ensure that researchers adhere to the guidelines and principles which prevent unethical practices consistent with recognized standards in the various academic disciplines.

Research projects usually involve complex social, legal, and ethical issues. The Policy and Procedures set forth in this document are applicable to all faculty, staff, and students at the University as well as to external research and administrative partners whose research activities involve human subjects, animals, and/or the environment.

II. Guiding Principles

Recalling on the

- Ethical principles, as determined by the University's mission and as prescribed by universal rules governing moral integrity, human rights, animal welfare, respect for the environment, which shall be observed at all times in any kind of research activity under the auspices of NDU;
- *Belmont Report* (Appendix 1) and Lebanese enforced law when applicable;
- Policy on Conflict of Interest in Research;

Recognizing that

- Academic researchers understand the importance of obtaining Informed Consent (IC) from the participants, and parent/guardian if applicable;
- Any research project must consider the rights, safety, risk-to-benefit ratio and protection, not only of humans as specified in the *Belmont Report* but also of animals and/or the components of the environment involved in the study;
- After considering property rights, any researcher shall be bound to fully disclose the methods and results related to his/her research when requested by the Institutional Review Board (NDU-IRB) in order to ensure full transparency and accountability to the University and to the overall scientific community;

Affirming that

- NDU research adheres to professional and moral processes;
- The rights and well-being of subjects (human or animal) are adequately protected;

An NDU-IRB will be formed to implement the present Policy on Ethics in Research.

III. Role and Responsibilities of the NDU-IRB

The NDU-IRB shall ensure that all individuals involved in research abide by the set policy and guiding principles. The following list is a summary of the most important responsibilities of the NDU-IRB:

- Offer advice, information and guidance rather than act as a legislative or judicial body;
- Recommend modifications, if necessary, for proposals submitted by the University researchers, regardless of the location of research activities;
- Oversee and determine intervals of periodic review, where appropriate;

- Recommend suspension or termination of research not conducted in accordance with IRB requirements or complicit in the foreseen or unforeseen possible serious harm to research subjects;
- Prepare an Annual Report to the University Research Board on the operations of the NDU-IRB;
- Ensure that appropriate mechanisms exist in the University to resolve issues related to ethical procedures and ethical violations when conducting research;
- Ensure the provision of appropriate training for all University academic and non-academic staff to equip them with the knowledge and competencies required for the ethical treatment of research subjects;
- Ensure full confidentiality to all research participants during the mandate of the research process, unless a priori disclosure guidelines are agreed upon by all individuals involved;

Should the NDU-IRB recommend suspension or termination of a research project, the IRB shall make disclosure to the leading researcher(s) and research participants as well as all concerned administrators including, but not limited to, the VPSRD, the concerned Dean and Department Chair. The NDU-IRB's report must include a complete statement providing evidence for disapproval with supporting evidence for the withdrawal of support.

IV. Composition of the NDU-IRB

The President designates the Vice-President for Sponsored Research and Development (VPSRD) as having ultimate responsibility for the assurance and implementation of the fulfillment of all NDU-IRB roles and responsibilities and for the compliance with research guidelines and procedures.

In coordination with the Faculty Deans, the VPSRD invites faculty members to express their interest to serve on the NDU-IRB. The selected members' names are forwarded to the President for final approval. Members are selected based on the need of their particular expertise. They must be characterized by maturity, research experience, and academic expertise to qualify for membership as well as able to ascertain the acceptability of proposals in terms of risks and benefits, institutional commitments, regulations, applicable laws, and standards of professional conduct and practice.

Members of the NDU-IRB are appointed to a one-year term that is renewable.

The NDU-IRB may not at times have the necessary expertise to judge the soundness (scientific or non-scientific) of a research protocol and may possibly be unable to provide a fair and accurate risk assessment. For these protocols, the NDU-IRB chair, may call upon an ad-hoc committee for assistance to review the scientific merit by performing an in-depth review of the study, or legal counsel to assist the NDU-IRB in conducting its duties. The ad-hoc consultants/legal counsels have no voting rights and must disclose whether they have any conflicts of interest with the protocol.

V. Submissions and Review Procedures

Prior to the implementation of the research project, each researcher shall:

First, consult with the NDU-IRB prior to submission of a research proposal to discuss any issues relating to human, animal, and environmental subjects and the possibility of ethical considerations for the successful carry-out of the project.

Second, secure the approval of the concerned Department Chair and Dean. In some circumstances, however, the NDU-IRB will consider delegating (should the concerned Dean communicate to the NDU-IRB in writing) to an appropriate person in the Faculty as long as that person is experienced in the requirements for protecting research subjects and has the authority to sign for the Department Chair in this regard. The responsibility for local supervision of the project, however, remains with the Department Chair.

Third, submit the application form (Appendix 2), IC form (Appendix 3), and other forms whenever applicable to the NDU-IRB. The NDU-IRB checks the application to ensure that all the necessary documents/materials have been submitted for NDU-IRB review.

It is worth noting that research projects are reviewed according to the research potential level of risks to research subjects/environment, and as determined by the NDU-IRB. The risks to which research subjects may be exposed are classified as physical, psychological, social, and/or economic.

The NDU-IRB holds all research proposals to the same standards.

VI. Training

In order to comply with the policy, the NDU-IRB members and researchers from NDU who wish to conduct human and/or animal subject research at the University are required to complete the online training as outlined in the Collaborative Institutional Training Initiative (CITI)[2].

[2] The CITI Program is a subscription service, providing Research Ethics Education to all members of the research community. Online training can be obtained at https://www.citiprogram.org/

Appendix 1

***Belmont Report* Principles**[3]

Three basic principles of the *Belmont Report* are central to the ethics in research, involving human subjects. These are:

- **Respect for persons-**applied by obtaining informed consent and considering privacy, confidentiality, and additional safeguards for vulnerable populations;
- **Beneficence-**applied such that the potential benefits of research are maximized and possible risks are minimized to the persons involved;
- **Justice-**evidenced in the equitable selection of research participants.

[3] *Belmont Report*: http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html

Appendix 2

Application Form

(Based on the *IRB Guidebook*[4])

Title of the Study	
Sponsored by	
Purpose	
Concise Summary of Project [200 words]	
Profile of the Research Subjects	
Recruitment Methods and Consenting Process	
Potential Risks (such as discomfort, inconveniences expected)	
Potential Benefits (solution to social/environmental problems, advance of knowledge, treatment of any kind, etc.)	
Subject Safety and Data Monitoring	
Procedures to Maintain Confidentiality	

Evaluation criteria: (For experimental purposes only, the NDU-IRB will adopt the evaluation criteria as developed in the *IRB Guidebook*.)

1. Are both risks and anticipated benefits accurately identified, evaluated, and described?
2. Are the risks greater than minimal risk? Has the NDU-IRB taken into account any special vulnerabilities among prospective subjects that might be relevant to evaluating the risk of participation?
3. Has due care been used to minimize risks and maximize the likelihood of benefits?
4. Are there adequate provisions for a continuing reassessment of the balance between risks and benefits? Should there be a data and safety monitoring committee?

[4] The *IRB Guidebook*: http://www.hhs.gov/ohrp/archive/irb/irb_guidebook.htm

Appendix 3

Informed Consent Form

(Based on IRB Guidebook)

GENERAL INFORMATION

Title of Research	[insert title]
Funding Agency/Sponsor, if any:	
Names of the Leading Researcher and Those Individuals Who will Obtain Consent	
Contact Person Phone Office Hours	[Insert LR name in the absence of a contact person] [insert phone number]

RESEARCH STUDIES: MATERIALS & METHODS

Statement About the Research Studies	[the study involves ……]
Purpose(s) of the Research	
Expected Duration of the Subject's Participation	
Description of the Procedures to be Followed	
Detailed Experimental Procedures	
Approximate Number of Subjects Involved in the Study	
Profile of the Research Subjects	
Circumstances Under Which the Subject's Participation May be Terminated by the Leading Researcher Without Regard to the Subject's Consent	

RISKS & BENEFITS

Foreseeable Risks or Discomforts to the Subject	
Benefits Expected from the Research	
Disclosure	Description of appropriate alternative procedures or courses of treatment if any, that might be advantageous to the subject
Confidentiality Statement	Describe the extent, if any, to which confidentiality of records identifying the subject will be maintained
Medium to High Risks	Explain as to whether any treatments are available if injury damage and, if so, what they consist of, or where further information may be obtained
Subject's Compensation to be expected (if any)	

Consent Statement (Based on *IRB Guidebook*)

Being informed that any particular treatment or procedure may involve risks which are currently unforeseeable; I, [insert name], state hereby that my participation in the research study is voluntary. Any

refusal to participate will involve no penalty or loss of benefits to which I am entitled. I may as well discontinue participation at any time without penalty or loss of benefits to which I am entitled.

_____, _____,
Signature(s) of the participant(s) or guardian — Signature of the Leading Researcher (LR)

_____,
Signatures of the witnesses (where appropriate)

Evaluation criteria: (For experimental purposes only the NDU-IRB will adopt the evaluation criteria as developed in the *IRB Guidebook*).
l. Do the researchers plan to involve a particularly vulnerable subject population?
2. Do the proposed explanations of the research provide an accurate assessment of its risks and anticipated benefits? Is the possibility (or improbability) of direct benefit to the subjects fairly and clearly described?
3. Is the language and presentation of the information to be conveyed appropriate to the subject population? (Consider the level of complexity and the need for translation into a language other than English.)
4. Are the timing of and setting for the explanation of the research conducive to good decision making? Can anything more be done to enhance the prospective subjects' comprehension of the information and their ability to make a choice?
5. Who will be explaining the research to potential subjects? Should someone in addition to or other than the Leading Researcher be present?
6. Should subjects be reeducated and their consent required periodically?
7. Should the NDU-IRB monitor incoming data to determine whether new information should be conveyed to participating subjects? How often should this occur? Who is responsible for bringing new information to the attention of the NDU-IRB between scheduled reviews?
8. If a waiver of some or all of the consent requirements is requested, does the importance of the research justify such a waiver? Is more than minimal risk involved? Can the research design be modified to eliminate the need for deception or incomplete disclosure? Will subjects be given more information after completing their participation? Would the information to be withheld be something prospective subjects might reasonably want to know in making their decision about participation?

ACRONYMS

CITI	Collaborative Institutional Training Initiative
IC	Informed Consent
IRB	Institutional Review Board
NDU	Notre Dame University - Louaize
LR/PI	Leading Researcher/Principal Investigator
URB	University Research Board
VPSRD	Vice-President for Sponsored Research and Development

University Research Board
Policy on Conflict of Interest in Sponsored Research

Approved by the BOD Nov. 29, 2012
Approved by the UC on Feb. 13, 2013

Introduction
Faculty members at Notre Dame University–Louaize (NDU) are committed to do research for the expansion and dissemination of knowledge and education, in conformity with the University's Identity, Mission, Vision, and Values.

The purpose of this policy is to outline the principles for identifying and managing financial conflicts of interest related to sponsored research conducted at the University. Conflict of interest could arise:

- When a member of the University involved in sponsored research is in a position to influence a decision, policy, or purchase, with the intent to financially benefit, provide benefit to others, or advantage or disadvantage a colleague, staff member, or student.
- As a consequence of researchers' involvement in outside activities or commitment, adversely affecting the primary faculty commitment to NDU in terms of student instruction, research, and services.
- When a researcher (or immediate family member or co-dependent) has a financial interest in an external venture that exhibits similarity to the researcher's line of investigation at the University. Such financial interest encompasses any form of paid service.

Guiding Principles for Avoiding Conflict of Interest

1. Research findings are normally disseminated as broadly as possible. Researchers working on sponsored research projects however, reserve the right not to disclose information or content of research unless an approval is granted by the stakeholders.
2. Sponsored research cannot be accepted if the findings are predicated, predetermined, dictated, or influenced by the sponsor or any other party.
3. The University encourages research involving student participation as part of its educational goals; however, the students' competencies, rights, and well-being must prevail over any other consideration(s) in the selection process. Researchers must exercise common sense when involving students in projects, with outcomes that serve the interests of a researcher in terms of personal gain or any other personal benefit accruing from such research.
4. It is the duty of researchers involved in external consulting or other agreements to ensure that these external commitments do not in any way conflict with the NDU policy, or the commitment of the University under sponsored grant or contract.

Resolving Conflict of Interest

The professional integrity of a researcher is the first and most fundamental line of defense against conflict of interest. In the emergence of a Conflict of Interest, a disclosure form must be submitted to an ad-hoc committee of the University Research Board (URB): Conflict of Interest Review Committee (URB-CIRC). This committee convenes under the authority of the VPRSD. It receives and evaluates each case in collaboration with the Dean of the concerned Faculty. After due investigation, the committee will recommend the appropriate measure(s) to the President by which research objectives would be reached.

Notre Dame University–Louaize
University Research Board - Conflict of Interest Review Committee
(URB-CIRC) - Disclosure Form

This form is to be completed in the cases of Conflict of Interest in sponsored research. It is to be submitted to the VPRSD office, and forwarded to the University Research Board: Conflict of Interest Review Committee (URB-CIRC).

Name: _____ Dept: _____ Faculty: _____

Title & Position: _____

Telephone Number: _____ Mobile: _____ Email: _____

Principal Investigator: _____ Sponsor: _____ Proposal Deadline: _____

Proposal Title:

Please answer the following questions to help clarifying the case to be investigated:

1- Were you withholding any information for improper personal benefits?

□**YES**

□**NO**

2- Did you accept Sponsored Research knowing that the findings are predicated, predetermined, dictated, or influenced by the sponsor or any other party?

□**YES**

□**NO**

3- Have you involved students in projects, with outcomes that serve your interests in terms of personal gain or any other personal benefit accruing from such research?

□**YES** □**NO**

4- Did you undertake external consulting or other agreements that conflict with NDU's policy or the commitment of the University under sponsored grant or contract?

□**YES**

□**NO**

If you have answered **YES** to any of the above questions, kindly provide more information in the box below, or attach an extra sheet. Please note that further specific information might be required.

I have read and understood the **Notre Dame University – Louaize's Policy on Conflict of Interest in Sponsored Research** and made all required disclosures. I am committed to submit a proposal for a Conflict of Interest Management Plan if requested. I certify that I will comply with all conditions and

restrictions imposed by the University URB-CIRC to manage, reduce, or eliminate any situation of Conflict of Interest concerning my research.

Name: _____ Signature: _____ Date: _____

TO BE COMPLETED BY THE URB-CIRC

Was any Conflict of Interest situation noted? ☐**YES** ☐**NO**

If **NO**, forward this form to the VPRSD

IF **YES**, recommend action:

Name: _____ **Signature: _____** **Date: _____**

Title: _____

FAAD – Department of Architecture
Changes – Bachelor of Architecture

Approved by the BOD on April 10, 2013
Approved by the UC June 18, 2013

Rationale

1. The need to introduce the basics of Architectural Design from the first term. The first term is therefore thought of as a preparatory year before the start of the Architecture Design series in the second year.
2. The need to ensure consistency in the credit load of the Architecture Design series. ARP 311 "Architectural Design I" and ARP 322 "Architectural Design II" are the only courses with a five (5) credit courses and should be adjusted to a six (6) credit courses each.
3. The need to include ARP 301 "Technical Drawing II" in the first year as a prerequisite to ARP 311 "Architectural Design I".
4. The need to revise the content and the learning outcome of all the ARP courses in the first year namely ARP 226 "Technical Drawing I", ARP 301 "Technical Drawing II", ARP 222 "Principles of Architectural Design"), ARP 221 "Architectural Sketching and Rendering", ARP 223 "Descriptive Geometry".
5. The redundancy of the content of GDP 212 "Design Principles" with the contents of the ARP courses of the first year.
6. Knowing that the GER "General Education Requirement" courses are of a total of 27 credits in addition to 6 Credits of "Free Electives", and that the Architecture Program is in need of all necessary credits of the ARP courses to meet the requirements of having a professional license for the practicing architects to be, three (3) credits are therefore strongly needed and cannot be disregarded despite the relative importance of GDP 212 "Design Principles".

a- Description of changes

- Deletion of GDP 212 (Design Principles I), 3 credits.
- ARP 311 (Arch. Des. I): **6 credits** instead of 5 credits.
- ARP 322 (Arch. Des. II): **6 credits** instead of 5 credits.
- In the suggested Program, move ARP 226 (Technical Drawing I) from Spring Semester I to Fall Semester I.
- In the suggested Program, move ARP 301 (Technical Drawing II) from Fall Semester II to Spring Semester I.
- ARP 226 (Technical Drawing I) to be added as prerequisite to ARP 221 (Arch. Sketch. & Rendering).
- ARP 226 (Technical Drawing I) to be added as prerequisite to ARP 222 (Principles of Arch. Design).
- GDP 212 (Design Principles I) to be removed from the prerequisites of ARP 226 (Technical Drawing I).
- ARP 223 (Descriptive Geometry) to be added as prerequisite to ARP 301 (Technical Drawing II).
- ARP 301 (Technical Drawing II) to be added as prerequisite to ARP 311 (Architectural Design I).
- ARP 224 (Applied Arch. Design I) to be added as prerequisite to ARP 433 (Architectural Design III).
- ARP 224 (Applied Arch. Design I) to be added as prerequisite to ARP 551 (Cons. Detailing Studio I).
- ARP 311 (Architectural Design I) to be added as prerequisite to ARP 563 (Bldg Rules & Regulations).
- Two required Major Electives of 3 credits each instead of one major elective of 3 credits.
- The new course to be added: ARP 571 - Seminar III and ARP 572 – Seminar IV
- One required Major Electives of 2 credits instead of two major elective of 2 credits each.

Please refer to joined copy of the Architecture Program where all changes are highlighted in grey.

b- Impact on program Learning Outcomes, on admissions, or on graduation requirements, etc.

Learning Outcomes: The required changes are mainly meant, on one hand, to ensure continuity between the different Architectural Design Courses and on the other to avoid redundancy in the delivered materials. Moreover, the new required prerequisites aim at avoiding situations where first-year students can enroll in upper level courses without fulfilling all the relevant requirements.

The new changes do not have any impact on the Admission and Graduation requirements.

c- New Suggested Program

Attached, please find a copy of the New Suggested Program.

d- Possible Instructors

All the instructors that were and still are teaching the same courses. Except for the newly added two major elective courses (please see below in item "f"), the changes do not require new instructors.

e- New courses (including all related information: Rationale, Course description, Learning outcomes, textbook and references, possible instructors).

Two new courses were added to the pool of the three-credit Major Elective Courses. Similarly to the existing two-credit courses (ARP 581- Seminar I and ARP 582 - Seminar II), the requested two courses (3 credits each) are meant to allow the Architecture Students to benefit from the various exposures that could be provided by visiting professors or specialists in specific fields. The course description, learning outcome, and textbooks are therefore subject to change depending on the nature of the suggested course and the choice of the instructor / specialist. The suggested courses will have the following labels and titles: ARP 571 - Seminar III and ARP 572 – Seminar IV.

FAAD – Department of Architecture
Masters of Architecture – Environmental and Urban Planning

Approved by the BOD on May 15, 2013
Approved by the UC June 18, 2013

What is this program about? There is an ever increasing demand for dealing holistically with urban and environmental issues at various extents and scales of complexity. These issues are often related to demographic, economic, environmental, ecological, technological, institutional and political changes. Solutions to such issues are based on systemic and systematic, collaborative and inter-disciplinary processes, and responses to contextual social, economic, cultural, and environmental specificities and needs.

Program Aims This program builds on the inter-disciplinary approaches of urban planning, landscape, ecology, environment and urban design, and integrates their concepts, and methodologies within a trans-disciplinary learning environment manifested in the large case study and program thesis. The inter-disciplinary approach seeks to achieve a more comprehensive learning environment through the combination of knowledge and methods acquired in the various fields covered in the program. This approach stands in contrast to a multi-disciplinary one that provides multiple views based on the various disciplines, while the output remains limited, and separate to each individual discipline. Therefore, a trans-disciplinary approach overcomes disciplinary barriers and seeks the complete merging and generation of an innovative body of knowledgebase within new holistic thinking.

Why would I be interested to join this program? The program offers professional development and increased competence based on innovation, and experimentation that are anchored in a solid, and broad knowledgebase. With this profile, program participants would be able to identify and respond to urban issues as well as manage, and intervene to improve the quality of the urban and natural environments; all while engaging and communicating with stakeholders with various concerns and interests. Therefore, the program serves professionals who want to continue their postgraduate studies or those who want to further specialize in their vocation.

Admission Requirements
In addition to the university admission requirements for graduate students (refer to: http://www.ndu.edu.lb/admissions/requirements.htm#gradadm), the candidate must submit a letter of intent (in which the candidate's background, reasons for selecting this program, future utilization of this degree and other expectations are clearly stated), and schedule an interview with the faculty graduate committee.
Moreover, applicants for the graduate program may be granted a maximum of nine transfer credits of graduate studies taken at another accredited institution of higher education provided that the transfer course(s) correspond to NDU (as per the NDU catalog), and MAP course requirements.
In order to be accepted into the program, students must take nine (9) credits per semester as full-time candidates. Part-time candidates would be accepted on a case-by-case basis.
The program targets fresh graduates, and professionals with undergraduate degrees in Architecture, Landscape Architecture, and Civil Engineering. Graduates and professionals from other degrees will be accepted on a case-by-case basis.

Graduation Requirements
Students seeking the degree of Masters of Architecture in Environmental and Urban Planning must meet the university graduation requirements and complete the **36 credits** with a cumulative average of at least 3.0/4.0.
Core Courses (30 cr.)
MAP 610, MAP 611, MAP 612, MAP 613, MAP 620, MAP 621, MAP 622, MAP 623, MAP 624, MAP 660, MAP 661, MAP 690
Elective Courses (6 cr.) MAP 650, MAP 651, MAP 652, MAP 653, MAP 654, MAP 655

Suggested Program

Year I			
Fall Semester (9 credits) (Foundation/Preparatory Semester)			
MAP	610	Research Methodology (writing research, Qty, Qlty methods, presentation)	3 cr.
MAP	611	Urban Economics and Real Estate Development (basic notions)	2 cr.
MAP	612	Overview on Urban Design and Planning (various approaches)	2 cr.
MAP	613	Basic environmental Concepts Related to Urban Design and Planning	2 cr.
Spring Semester (9 credits) (Tools, Skills, and Basic Abilities)			
MAP	620	GIS and Remote Sensing (to be applied in the LCS)	3 cr.
MAP	621	Urban Planning Law	2 cr.
MAP	622	Transportation Planning	2 cr.
MAP	623	Policies in Urbanism	2 cr.
MAP	624	Students should propose their thesis topic by the end of this semester	0 cr.
Year II			
Fall Semester (9 credits) (Specialized Courses and Large Case Study)			
MAP	650	Special Elective related to landscape, ecology and environment I	2 cr.
or			
MAP	651	Special Elective related to landscape, ecology and environment II (EIA)	2 cr.
MAP	652	Special Elective related to urban planning I (transportation: non-motorized mobility)	2 cr.
or			
MAP	653	Special Elective related to urban planning II (commercial and public spaces)	2 cr.
MAP	654	Special Elective related to urban design I (regeneration)	2 cr.
or			
MAP	655	Special Elective related to urban design II (waterfronts)	2 cr.
MAP	660	Large Case Study – Part I	
Spring Semester (9 credits) (Master Thesis)			
MAP	661	Large Case Study – Part II	
MAP	690	Thesis	
Total			**36 cr.**

FAAD - Changes – BA in Decorative Arts & Crafts

Approved by the BOD on May 22, 2013
Approved by the UC June 18, 2013

Rationale:
The modified and upgraded Decorative Arts & Crafts program is NDU's unique proposition in Lebanon (first university ever in the country to promote such major).
The offered major addresses a market demand in creating a category of specialized expert craft artists, fulfilling students expectations in facilitating their job quest as well as allowing the creation of own business ventures, once they major and leave our university.

The Decorative Arts & Crafts program outline & structure have been modified as well relevant course titles & descriptions.

The modifications to the Decorative Arts & Crafts program are aimed mainly at updating courses and contents, thus upgrading the old, somewhat vague course titles and descriptions to clear and concrete addresses. This will definitely re-attract students to this specific major. Finally, students will be able to enroll to courses such as:
Conceptual Visual Thinking: Arts & Crafts, Pottery & Ceramics, Application in Fibers, Wood, Metalsmithing, Glazing & surface effects, Surface Design, Jewelry, wood & Furniture, Architectural Ceramics, Concepts in Contemporary Fibers, Contemporary Jewelry, Special Topics: Wood and Other Materials, Craft & Entrepreneurship, Senior Studio Craft, etc…as opposed to the former unappealing: Technique I, Technique II, Arts & Crafts I, Arts & Crafts II, III & IV, Studio Art I, Studio Art II, and Studio Work I and Studio Work II.

On the other hand, the "Leather" material has been removed and replaced with "wood and Furniture". Based on a thorough research respectively, the Decorative Arts & Crafts undergraduate programs are structured mainly on the following four disciplines:

- **Ceramics**
- **Metalsmithing & Jewelry**
- **Fiber Arts**
- **Wood & Furniture**

Finally, it is worth noting that intensive endeavors, detailed research, discussions, meetings with professionals in the field, have lead to the 102 credits program in its current modified, upgraded structure and form. Syllabi were developed, in the former program version course syllabi were inexistent.

The Degree of Bachelor of Arts in Decorative Arts and Crafts

The Bachelor of Arts in Decorative Arts and Crafts is a degree program for students planning to become professional artists. The program is designed to provide the essential skills in: Ceramics, Jewelry /Metalsmithing, Wood/Wood Furniture and Textiles/Fiber Arts.

Students will acquire a thorough understanding of materials, techniques inspired from traditional methods and new technologies including computer applications. They will work with 2D and 3D applications with an emphasis on creative approaches to design, craftmanship and personal interpretation.

The program aims at developing the aesthetic and practical aspects in the creation of functional or one of kind collections and artworks.

Ceramic courses will lead the students to a professional creative career exposing him/her to the rich heritage of all basic handbuilding techniques complimented with the contemporary innovative processes backed up with the possible industrial equipments needed in the field.

Students will execute projects reflecting their evolving aesthetic values and the ability to build an individual identity reflecting their environment and its actual needs.

Metalsmithing and Jewelry courses that focus on building a wide and rich knowledge of the basic techniques and processes of metalsmithing and jewelry making, encouraging students to use effectively their learnt skills while evolving their own identity in expressing their conceptual thinking and gaining aesthetique criteria to evaluate art piece in relation to its human context.

Courses in Fiber Arts will cover surface design, loom and non loom constructions for the creation of fabrics and art objects. In surface design, students will learn processes such as silk-screen printing, resist dying, block-printing and design technologies for imagery and repeat patterns. Practices on the loom will allow students to learn drafting methods, weave structures, tapestry techniques, dyed and painted warps, and the interaction of color, fiber and texture. Experiences in non-loom methods will cover basketry, knotting, feltmaking, hand-made paper and others.

Wood/Wood Furniture, are courses that familiarizes students to the use of both machine and hand tools as well as working towards obtaining expertise in joinery and shaping different sorts of wood. Although the primary focus is on woodworking and furniture design, but students will be exposed to many diverse ideas and techniques that encourage new concepts, examine and solve manifold conventions and finally encourage investigation of recycled and other sustainable materials that could be embraced with wood.

Graduates may design for industry, while others start their own business or build an exhibition portfolio as a Fine Arts.

Admission Requirements:
In addition to the University admission requirements, prospective candidates must complete any remedial English course(s) the first year of enrollement. Students who fail to meet the above requirements will not be allowed to proceed to the degree courses in Decorative Arts and Crafts and other majors in the Art Department of the Faculty of Architecture, Art & Design.

Graduation Requirements:
To receive the degree of Bachelor of Arts in Decorative Arts and Crafts, a student must complete a total of 102 credits with an overall grade-point average of at least 2.0/4.0 and a minimum cumulative grade point average of 2.3/4.0 in all Core and Major Courses. All major courses with a grade of less than "C-" must be repeated. The 102 credits necessary for graduation are divided as follows:

Degree Requirements: Decorative Arts and Crafts
(102 credits)

General Education Requirements (GER):	**30 cr.**
The GER are distributed as follows:	
Communication skills in English, ENL 213 & ENL 223 or ENL 230	6 cr
Communication skills in Arabic, One course from: ARB 211, ARB 212, ARB 224, ARB 231, ARB 317	3 cr.
Religion: One course from: REG 212, REG 213, REG 314, REG 313, REG 215	3 cr.

Philosophy, One course from: PHL 211, PHL 311, POS 345, ENS 205	3 cr.
Cultural Studies, Two courses from: HUT 305, HUT 306, PSL 201, SOL 201, SOL 301, SOL 313, MUS 210, FAP 215, ARP 215, BAD 201, ECN 200, COA 359, COA 315, NTR 215, ECN 211, ECN 212	6 cr.
Citizenship, one course from: HIT 211, IAF 301, POS 201, POS 210, POS 240, POS 319, POS 337	3 cr.
Science and Technology, two courses from : AST 201, BIO 201, BIO 202, BIO 203, CHM 211, ENS 201, ENS 202, ENS 206, CSC 201, CSC 202, GIS 211, HEA 201, MAT 201, MAT 202, MAT 204, MAT 211, MIS 201, NTR 201, PHS 211, STA 202, STA 210, PHS 207	6 cr.
Core Requirements FAP 211, GDP 212, FAP 221	**9 cr.**
Major Requirements FAC 215, FAC 222, FAC 223, FAC 331, FAC 332, FAC 333, FAC 334, FAC 325, FAC 341, FAC 342, FAC 343, FAC 344, FAC 323, FAC 431, FAC 432, FAC 433, FAC 434, FAC 445, FAC 446	**57 cr.**
Free Electives	**6 cr.**

Bachelor of Arts Degree in Decorative Arts and Crafts
Suggested Program (102 Credits)

Foundation Studies (Year I)			
Fall Semester (15 Credits)			
FAP	211	Drawing I	3 cr.
GDP	212	Design Principles I	3 cr.
FAC	213	History of Decorative Arts and Crafts	3 cr.
___	___	GER	3 cr.
___	___	GER	3 cr.
Spring Semester (15 Credits)			
FAP	221	Drawing II	3 cr.
FAC	222	Conceptual Visual Thinking: Art and Craft	3 cr.
FAC	223	Applied Modeling and Rendering I	3 cr.
___	___	GER	3 cr.
___	___	Free Elective	3 cr.
Summer Session (6 Credits)			
___	___	GER	3 cr.
___	___	GER	3 cr.
Year II			
Fall Semester (18 Credits)			
FAC	331	Pottery and Ceramics	3 cr.
FAC	332	Application in Fibers	3 cr.
FAC	333	Metalsmithing	3 cr.
FAC	334	Wood	3 cr.
FAC	325	Contextual Studies in Modern and Contemporary Crafts	3 cr.
___	___	GER	3cr.
Spring Semester (18 Credits)			
FAC	341	Glazing and Surface Effects	3 cr.
FAC	342	Surface Design	3 cr.
FAC	343	Jewelry	3 cr.
FAC	344	Wood and Furniture	3 cr.
FAC	345	Applied Modeling and Rendering II	3 cr.
___	___	GER	3 cr.
Summer Semester (6 Credits)			
___	___	GER	3 cr.
___	___	GER	3 cr.
Year III			
Fall Semester (12 Credits)			

FAC	431	Architectural Ceramics	3 cr.
FAC	432	Concepts in Contemporary Fibers	3 cr.
FAC	433	Contemporary Jewelry	3 cr.
FAC	434	Special Topic: Wood and other Material	3 cr.

Spring Semester (12 Credits)

FAC	445	Senior Studio Craft	3 cr.
FAC	446	Craft and Entrepreneurship	3 cr.
___	___	GER	3 cr.
___	___	Free Elective	3 cr.

Undergraduate Courses: Decorative Arts and Crafts

FAC 213 History of Decorative Arts and Craft (2.2); 3 cr. This course examines major achievements from prehistoric period to the beginning of the 20th century, with a focus on17th through early 20thcenuries European and American decorative arts. The course covers ceramics, fiber arts, metalsmithing, jewellery, wood and furniture. Emphasis is placed on how craft objects reflect the culture, the societies and the times in which they were created. Required: students should have passed all remedial English courses in order to be able to enrol in this course.

FAC 222 Conceptual Visual Thinking: Art and Craft (2.2); 3 cr. This course uses design elements and principles for the creation of 3-D objects. The application of material and processes are drawn from the fiber arts, metals, wood, clay and mixed media. Forming techniques may use methods such as basketry, felting, paper or clay casting, wood carving, wiring, and deconstruction of found material. *Prerequisites:* GDP 212 and FAC 213

FAC 223 Applied Modeling and Rendering I (2.2); 3 cr. Computer modeling and rendering have become an essential procedure for artists and designers who seek for accuracy and presentation for the main goal to concretize their ideas with the utmost accuracy and realism. The course covers the basic concepts of 2D and 3D modeling and rendering: modeling, lighting, texture mapping and rendering are introduced in a production setting. *Corequisite*: FAC 222

FAC 331 Pottery & Ceramics (2.2); 3 cr. Pottery and Ceramics will concentrate on basic hand building techniques: such as mixing and de-airing, pinching, coiling, slab building, wheel throwing. The student will be introduced to glazing and kiln firing.

FAC 332 Application in Fibers (2.2); 3 cr. An overview of fabric construction processes emphasizing structure and applications in fiber arts including loom or non-loom weaving, basketry, felting, knotting, and papermaking. Procedures for warping, drafting pattern, texture and color problems are considered.

FAC 333 Metalsmithing (2.2); 3 cr. This course will cover the basic handmade techniques in metalsmithing enabling the student to acquire the needed skills in jewelry making.
It includes metal folding, forming, metal wire techniques, soldering and assembling.

FAC 334 Wood (2.2); 3 cr. Introduces the students to various wood finishes used in Decorative Arts and Crafts. Students are expected to explore the different kinds of wood and its characteristics. Creative projects will be tackled during the semester using different kinds of wood exploring unlimited possibilities.

FAC 325 Contextual Studies in Modern and Contemporary Crafts (2.2); 3 cr. This course will introduce students to Contemporary Craft theory and practice. Students will become familiar with the recent history of contemporary Craft movements, practitioners and their motivation. The role of craft as an expressive Art form will be explored as well as it¹s role in industrial Design. They will learn about the complex debates surrounding contemporary Craft¹s Œraison d¹etre¹ and become aware of the varying points of view attributed to the leading authors of this field. *Prerequisite:* FAC 222

FAC 341 Galzing and Surface Effects (2.2); 3 cr. Once the student potter has developed a thorough understanding of the capacity of clay as a medium of creation based on basic hand-building techniques and has been introduced briefly to glazing in the previous Pottery and Ceramic course; now the student is in a position to indulge deeply in enlarging his spectrum of glazing and surface effects which will fuse in harmony with form and function.
Prerequisite: FAC 331

FAC 342 Surface Design (2.2); 3cr. This course considers all aspects of surface design covering styles, the use of imagery, repeats, printing, dying, fiber properties and fabric finishes. *Prerequisite:* FAC 332

FAC 343 Jewelry (2.2); 3cr. Having completed the Metalsmithing course and apprenticeship, the student should be qualified to step ahead in jewelry designing and making. This course focuses exclusively on designing – making a skillfully crafted conceptual piece of jewelry and miniature scaled sculptures. It is based on creating silver and copper jewelry with enamel finishing and patination techniques. *Prerequisite:* FAC 333

FAC 344 Wood and Furniture (2.2); 3cr. The course will investigate physical and psychological human factors to better understand the relation between humans and their furniture. Stress will be mainly on the use of wood to create contemporary furniture responding to 'day to day' needs. Reading, research, and workshops are held to investigate the characteristics of wood, way and means of construction. *Prerequisite:* FAC 334

FAC 345 Applied Modeling and Rendering II (2.2); 3 cr. This course builds upon skills introduced in FAC223 course. Being familiar with main modeling and rendering tools of 3D software, students will develop their 3D modeling and rendering skills mastering the software modeling tools through more complex geometry, advanced rendering techniques, and animation. *Prerequisite:* FAC 223

FAC 431 Architectural Ceramics (2.2); 3 cr. Students will learn to design and execute architectural ceramic projects in response to their own creative ideas and concepts with a deep understanding and great consideration of historical and contemporary architectural ceramics in different cultures and civilizations. Focus will be on developing basic forming techniques in particular, slab-building, glaze , surface texturing techniques and others, encouraging students to research and go beyond the traditional boundaries.
The main goal of this course is to create and make architectural ceramic projects reflecting all learnt skills into an innovative conceptual context which will perfectly fit in the surrounding environment. *Prerequisites:* FAC 331 and FAC 341

FAC 432 Concepts in Contemporary Fibers; 3 cr. This course is designed to allow students to pursue in more depth the ideas and techniques introduced in "Application in fibers" and "Surface Design". Students investigate contemporary uses of weaving, printing, knitting, or any improvised construction techniques. Using both handlooms and dobby looms, students may explore more possibilities in weaving. Material quality, color, and potential end use will be part of the criteria for analyzing work. Students' work can range from installations to two-dimensional pieces.
Prerequisites: FAC 332 and FAC 342

FAC 433 Contemporary Jewelry (2.2); 3 cr. This course focuses on designers-makers who will create both the concept and the perfectly crafted piece of jewelry. It includes researching and working with a very wide range of materials, organic and synthetic, and demonstrates both that craftsmanship is paramount and that contemporary jewelry is accessible to all, creating a self-expressive piece which will become the precious antique of the future.
Prerequisites: FAC 333 and FAC 343

FAC 434 Special Topic: Wood and other Material (2.2); 3 cr. This is a conceptual and technical course in which the senior student associates different disciplines to develop and execute in a high level of proficiency a prototype production using wood as the main element. Students will progressively develop analytical problem solving and explore the different possibilities of productive implementation. *Prerequisites:* FAC 334 and FAC 344

FAC 445 Senior Studio Craft (2.2); 3 cr. This course is designed for students to prepare a substantial body of work culminating in a senior exhibition. The course emphasizes the students' independent work and will help them integrate the learning acquired throughout the curriculum. The course consists of intense research developing the project under the supervision of the instructor who will act as a mentor and will assist the student in developing his/her personal direction. *Prerequisites:* FAC 431, FAC 432, FAC 433 and FAC 434

FAC 446 Craft and Entrepreneurship (2.2); 3 cr. This course is designed to guide students though the process of developing their arts and crafts related ventures, from concept initiation to branding scenario identification. The study involves thorough concept development, market research and feasibility studies for the venture's business plan. *Corequisite*: FAC 445

FAAD - Adjustment – BA in Fashion Design

Approved by the BOD on May 15, 2013
Approved by the UC June 18, 2013

Rationale:
Weakness in current program:

1. No digital courses; so far managed with random workshop, which is not durable.
2. The Patternmaking courses begin too late; in the second year, which does not allow for enough time to complete the learning.
3. History begins too late.
4. GDP 212 Design Principles I and GDP 222 Design Principles II are redundant with the program.

Suggested Solutions:

1. A new course **FTP 226 Digital Fashion Design** has been developed (syllabus attached) which includes software: Photoshop, Illustrator and CAD (Computer Aided Design), 1st years spring semester.
2. Sequence of the Patternmaking courses is adjusted to begin 1st year Spring Semester instead of 2nd year first Semester (FTP 318 Patternmaking I, will change course number to FTP 228). A new course **FTP 438 Senior Collection** has been developed (syllabus attached), to include final collection execution, wrapping and draping, placed last Semester of the degree.
3. FTP 224 "History of Fashion Design" is advanced to 1st semester.
4. GDP 212 Design Principles I and GDP 222 Design Principles II are deleted from the program in order to update the curriculum to a more contemporary version that will facilitate students to function professionally.

References attached, from flowing resources from top universities in USA.
http://www.risd.edu/Academics/Apparel_Design/Courses/

http://www.newschool.edu/parsons/bfa-fashion-design-curriculum/

Registrar has approved the three new course numbers.

Thank you for your consideration.

BA in Fashion Design Adjusted program

Year I

Fall Semester (12 credits)

FAP	211	Drawing I
FTP	224	History of Fashion Design (New Placement in the curriculum)
FTP	214	Textile Technology
FTP	212	Fashion Illustration I

= Remedial

Spring Semester (15 credits)
FTP 318**(228)** Patternmaking I (New Placement in the curriculum)
FTP 222 Fashion Illustration II
FTP 229 Fashion Design I
FTP 226 Digital Fashion Design (New Course)
= GER

Summer Session I (6credits)
= GER
= GER

Year II
Fall Semester (15 credits)
FTP 314 Contemporary Issues in Fashion Design
FTP 315 Fashion Studio I
FTP 328 Patternmaking II
FTP 319 Fashion Design II
= GER

Spring Semester (15 credits)
FTP 326 Fashion Trends and New Concepts
FTP 325 Fashion Studio II
FTP 418 Patternmaking III
FTP 329 Fashion Design III
= GER

Summer Session II (9credits)
= GER
= GER
= GER

Year III
Fall Semester (15 credits)
FTP 415 Fashion Studio III
FTP 428 Patternmaking IV
FTP 419 Fashion Design IV
= GER
= Free Electives

Spring Semester (15 credits)
FTP 423 Professional Practice & Marketing
FTP 425 Fashion Studio IV
FTP 438 Senior Collection (NEW COURSE)
= GER
= Free Electives

FAAD – Music Department
MUS 201 – Music Archeology - 3cr (03;0)

Approved by the BOD on May 15, 2013
Approved by the UC June 18, 2013

1. Rationale
In the Middle Ages, the *Trivium*, (Medieval Liberal Art) which included 3 disciplines: Grammar, Logic and Rhetoric was born. Shortly thereafter, the *Quadrivium* which contains: Music, Geometry, Arithmetic and Astronomy embarked to complete the educational needs. By combining the *Trivium* and *Quadrivium*, humanity established the *Classical University Studies of liberal arts*, hence the term "BA: Bachelor of Art) was created.

Much earlier, in the very ancient time, music was one of the major cultural and social languages. It was the instrument of promoting and preserving in the oral ethnic memory such as art, religion, philosophy, mythology, ethnology, anthropology, even wars and conflicts.
Teaching "Music Archeology" would gather both: teaching sciences and there history. It resurrects the various roles played by music at all times.
Consequently Archeological Music Inscriptions on stones, leather and Papyrus are the vehicular instrument of all cultures as reflected by archeological excavations and discoveries.

2. Course description
The course offers clear understanding of the musical role in forming religious rituals, cultural development, ethno-sociological beliefs and behavior, art and civilizations. It played a central role in shaping most forms of artistic creation.

3. Learning Outcomes:
Objectives of the course:

- Exposing students and making them aware of the main dates, events rituals and social behaviors of man throughout history.
- Students would be able to correlate between social sciences, architecture, philosophy liaising humans to divinities.
- Enrich the cultural personality of university students.
- Understand that music was the main and common mean of communication artifacts between people as expressed by archeological comprehension level.
- Increase student awareness of the ways ancient civilizations developed through music and expressed the identity of people and communities.
- Musical instruments used in ancient civilizations are the processors of modern instruments, notes and rhythms for music was then the main instrument of communication.
- The student, through this course, will take a trip into thousands of ancient history years and experience a small part of that treasure.

Application level:
This course offers a variety of applications relative to the student's major studies. Consequently it is recommended for all students regardless of any specific study.

Analysis level:
This course does not only provide students with specific knowledge, rather it develops the research capacity of analyzing through comparison of cultural elements related to astronomy, philosophy, architecture, science, physics, mathematics, and acoustical physics and others.

Synthesis level:
Students will be encouraged to reproduce what is known ancient instruments and become fully cultural by comparing ancient and modern cultures.

Evaluation level:
Student will be asked to assess the knowledge and value acquired from this course through research assignments.
Student could also visit certain Lebanese archeological sites (Phoenician, Hellenic, Roman, Aalawie, Byzantine, Islamic and others) thus deciphering the semantic relationship between the students' academic affiliation / background / discipline and the archeological inscriptions.

Text book:
The very distinguished and worldwide known archeologist and philologist Dr. Edmond Moussa owns a huge personal collection of archeological elements from his own excavation projects in the Middle-East, Europe, Africa, America and even China, all of which are backed up by bibliographical sources to be placed at the students' disposal.

Dr. Moussa who already taught this course for five years at NDU from 2002 to 2006, is possible instructor.

Faculty of Business Administration and Economics
New Major - MS Financial Risk Management

Approved by the BOD on March 13, 2013
Approved by the UC on June 18, 2013

Program Specifications Sheet

Awarding Institution	Notre Dame University-Louaize
Name of Final Award	Master's of Science Degree In Financial Risk Management (MS FRM)
Mode	Regular Evening Classes
Duration	Three Regular Semesters And One Summer
Number of Credits	30
Core Major Courses	6
Core Support Courses	2
Ms Thesis	Minimum 15,000 Words
Language of Study	English
Delivery Modes	Multiple
Assessment Modes	Multiple
Classification	As Per University Rules
Career Preparation	Yes
Career Enhancement	Yes
Professional Certification Links	Yes
Doctoral Studies Preparation	Yes
Program Fees	As Per University Rules

1. Background and Purpose

Recent years have witnessed an increasing interest in MS degrees. Many programs related to business studies have been developed and launched, particularly in the area of Finance (AUB's MS Finance and UOB's MS Accounting & Finance – both in Fall 2012). This tendency springs from the fact that these programs help to create and sustain a competitive edge in the market place through differentiation and growth.

In order to be able to answer the market needs and effectively face the growing competition, the Faculty of Business Administration and Economics (FBAE) at Notre Dame University decided to walk the pathway through the offering of high caliber MS specializations, starting with a MS in Financial Risk Management. This endeavor is not merely a reaction to the steps taken by other universities; it is a proactive attack taking advantage of the main weaknesses of the main competitors' newly launched programs, in particular:

- AUB's MS in Finance covers traditional areas in Finance with no possibility to emphasize a focus specialization.

- UOB's MS in Accounting & Finance was structured in a way to hunt both Accounting and Finance students in a very narrow market (total number of undergraduate Business students at UOB is around 350) and thus the student base does not warrant the opening of two separate MS programs. Again, the drawback is a loss of focus and a general exposure to materials.

FBAE's proposed MS in Financial Risk Management does not suffer from these issues. In addition to its focus on Financial Risk Management, it is closely related to the Financial Risk Manager (FRM®) professional certificate. Thus our graduates will not only possess a Master's degree but are able, with adequate effort, to successfully sit for the FRM exam. The program is designed in such a way to fulfill a range of purposes that reflect both the ambitions of students and the needs of this particular discipline. Much emphasis is placed on learning outcomes and the expected qualities and skills of the graduates. This adopted line of attack is crucial because it would potentially assure overseas institutions of higher education about the standard of this award and resolves issues of uncertainties related to future recognition; this can consequently lead to better acceptance rates of our graduating students into Western doctoral programs, and open doors for potential future collaborations and partnerships with other world-renown universities.

Mission

The MS in Financial Risk Management (denoted MS FRM) at Notre Dame University aims at providing aspiring candidates with a set of professional and technical skills allowing them to identify and manage various types of financial risk and solidly advance in their chosen pathway, whether that is further academic or professional studies, or employment.

2. Intended Entrants and Admission Requirements

Following the mission above, the MS FRM is designed to attract:

- Financiers, bankers, investors, auditors and other finance/ accounting/insurance professionals, preparing themselves for the next stage in their careers.
- Fresh business and economics graduates preparing themselves to jump-start a career in financial risk management.
- Professionals and business or economics graduates aspiring to pursue doctoral studies in financial risk management or any other subject allied to finance.
- Professionals and graduates of other scientific disciplines, in particular, engineering and hard sciences, contemplating a move into the world of finance and risk management.

The requirements for entry into the MS FRM program are:

Business And Economics Graduates

- an application form duly completed.
- two recommendation letters, one of which is from a university professor.
- a cumulative average of 80%.
-

Other Scientific Disciplines Graduates

- as above, plus
  Remedial Course(S): ACO 501 Fundamentals of Financial Accounting 1cr. and/or FIN 501 Fundamentals of Finance 2 Cr.

note that the minimum passing grade of remedial courses is **B** failing to pass these courses will lead to a dismissal from the ms program. in addition, a student can register along with the Remedial Course(S) FRM 665 Quantitative Methods For Finance 3 Cr. and/or FRM 680 Finance Research Methods 3 Cr.
PS. It Is Presumed That All Business/Economics Or Other Scientific Disciplines Students Have Already Taken Courses In Statistics and/or Quantitative Methods.

Credit Transfer and Work Experience

Up to 6 relevant master's level credits can be transferred from other relevant master's programs. Relevant programs include (list not exhaustive):

- MS, MA, MPhil or MRes programs in Business/Management
- MS, MA, MPhil or MRes programs in Economics or Financial Economics

- MBA (with or without concentration)
- MS, MA, MPhil or MRes programs in Mathematics, Statistics, Econometrics, Engineering, or other scientific disciplines

P.S. Some applicants with a relevant Bachelor degree could be admitted based on their work experience, subject to approval of the admission committee.

3. Program General Characteristics

The proposed MS program is predominantly composed of structured learning opportunities (taught elements) and discipline-related research components. It consists of a total of 30 Credit hours (American Credits) having the following structure:

Category	Total Credits	Percentage
Core Major Courses	6X3 Cr = 18 Cr	60%
Core Support Courses	2X3 Cr = 06 Cr	20%
Research Project	1x6 Cr = 06 Cr	20%
	Total = 30 Cr	**100%**

The Program is designed to run over 3 regular semesters and a summer. An indicative plan follows:

SEMESTER	CR	COURSES
Fall	12	3 Major Core + 1 Support Core
Spring	12	3 Major Core + 1 Support Core
Summer & Fall	06	Research Project: Thesis
Total	**30**	**6 Major Core + 2 Support Core + 1 Research Project**

3.1. Major Core Courses

As detailed above, there are a total of 6 major core courses:

New MS FRM		Existing MBA	
Code	**Title**	**Code**	**Title**
FRM 610	Derivatives	FIN 607	Derivatives
FRM 620	Advanced Investment	NA	NA
FRM 630	Economics of Financial Markets	NA	NA
FRM 640	Operational and Liquidity Risk Management	NA	NA
FRM 650	Credit Risk Management	NA	NA
FRM 660	Advanced Value Risk Management	NA	NA

3.2. Core Support Courses

It is noteworthy that the two support courses cover the following broad topics (for more details check the courses outlines):

- FRM 665 Quantitative Methods for Finance
- FRM 680 Finance Research Methods

These two support courses aim at:

- Increasing the MS candidates' awareness of the main theories in the disciplines of Finance and Financial Risk Management
- Equipping the MS candidates with the latest statistical and financial econometrics techniques
- Providing the relevant training in finance research design, thus allowing them to write robust research proposals and conduct research at the forefront of the discipline.
-

3.3. Research Project

FRM 690 MS Thesis: the final phase of the MS program consists of writing a structured Master's research thesis of around 15,000 words in the areas of finance, financial risk management, operational risk management, or allied disciplines (financial economics, econometrics, internal controls, etc.) based on an approved research proposal. Rules governing the procedures and the management of the MS Thesis are provided in a separate document.

4. Delivery and Assessment Modes

The proposed MS Program is supported by an integrated teaching, learning and assessment strategy that demonstrates the appropriateness of the learning, teaching and assessment methods used in relation to the intended learning outcomes being developed. The program's knowledge base and skills are delivered through lectures, seminars, practical work (computer laboratory), case studies and the use of academic and professional electronic databases, whereas assessment methods used in this program include unseen written examinations, case studies reports, individual and group essay assignments, oral presentations and a thesis. The following framework is adopted:

Attribute	Teaching/Learning	Assessment
Knowledge and understanding of Finance, Financial Risk Management, Numeracy and Research concepts	Lectures supported by directed study of textbooks and journals articles	Unseen written examination and project group work
Analysis, synthesis, and problem solving	Individual and group projects, problem-solving sessions, case study work, and computer laboratory sessions	Unseen written examination, case studies reports and other individual/group projects reports
Transferable key skills in particular communication and team work	Individual and group projects, essays and MS Thesis coaching	Oral presentations, group work projects and MS Thesis

5. Qualification Descriptor

The orientation of the proposed MS FRM is clearly directed towards Financial and Operational Risk Management. Moreover, the structure of the proposed MS program is explicitly linked to market needs of financial and operational risk management expertise as well as to the requisites of further studies in the disciplines of Finance. By - (1) enabling students to focus on particular aspects of Finance in which they have prior knowledge or experience, whether through previous study, employment, or remedial courses; and (2) by enabling students to learn how to conduct relevant research in the disciplines of Finance and Financial Risk Management; and (3) by enabling students to undertake a research project on a topic within the area of interest that makes up a significant portion of the overall assessment – the MS FRM seeks to:

- To prepare students for entry to the Finance and/or Risk Management, practices or professions, or for progression or transfer within them.
- To equip students to enter doctoral studies or to pursue relevant professional certifications (i.e. FRM ➔ Financial Risk Manager – managed by GARP).

5.1. Characteristics of Graduates

Informed by (1) The Framework of Qualifications of the European Higher Education Area, (2) The British QAA Master's Degree Characteristics, (3) The British QAA Subject Benchmark Statements for Finance, and (4) The American GARP FRM exam coverage, the proposed MS FRM program seeks to prepare graduates who are capable of demonstrating a systematic understanding of knowledge, much of which is at, or informed by, the forefront of the Finance research and professional practice. Moreover, graduates should be capable of demonstrating originality in their application of that knowledge and in addressing problems. They will have demonstrated a comprehensive understanding of the techniques applicable to their own research or advanced scholarship. In relation to employment, the MS FRM

graduates will be expected to possess the skills needed to exercise independent learning and to develop new skills to a high level.

5.1.1. Subject general attributes

- An in-depth knowledge and understanding of the Finance and Financial Risk Management disciplines informed by current scholarship and research, including a critical awareness of current issues and developments in the subject.
- The ability to complete a research project in the subject, which may include a critical review of existing literature or other scholarly outputs.

5.1.2. Subject-specific attributes

On completion of the MS FRM degree, a student should normally have the following subject-specific knowledge and skills:

- An appreciation of the nature of the contexts in which Financiers and Financial Risk Managers can be seen as operating, including knowledge of the different outlets where the profession could be exercised.
- Knowledge of the major theoretical tools and theories of Finance as applied to Financial Risk Management, and their relevance and application to theoretical and practical problems.
- An understanding of the relationship between financial theories and empirical testing, and application of this knowledge to the appraisal of the empirical evidence in at least one major theoretical area. The appraisal should involve some recognition of the limitation and evolution of empirical tests and theory.
- An ability to understand and interpret financial data. This interpretation may involve analysis using statistical and financial functions and procedures in spreadsheets and statistical packages. It assumes the skills necessary to manipulate financial data and carry out statistical and econometric tests.
- An understanding of the organizations' internal controls and governance structures of business entities, and an appreciation of how theory and evidence can be combined to assess the effectiveness and efficiency of such arrangements.
- An understanding of the risk factors influencing the investment behavior and operational decision-making.
- An ability to use current technical language of Finance.

5.1.3. Generic attributes

- Use initiative and take responsibility
- Solve problems in creative and innovative ways
- Make decisions in challenging situations
- Communicate effectively, with colleagues and a wider audience, in a variety of media.

5.1.4. Cognitive ability and generic skills of the graduates

On completion of the MS FRM degree program, a student should have acquired the following abilities and skills:

- A capacity for the critical evaluation of arguments and evidence
- An ability to analyze and draw reasoned conclusions concerning structured and, to a more limited extent, unstructured problems from a given set of data and from data which must be acquired by the student
- The ability to locate, extract and analyze data from multiple sources, including the acknowledgement and referencing of sources

- Numeracy skills, including the ability to manipulate financial and other numerical data and to appreciate statistical concepts at an appropriate level
- Skills in the use of communication and information technology in acquiring, analyzing and communicating information (these skills include the use of spreadsheets, word processing software, standard statistical packages; electronic financial databases; the internet and email)
- Communication skills including the ability to present quantitative and qualitative information together with analysis, argument and commentary in a form appropriate to different intended audiences
- Normally, experience of working in groups, and other interpersonal skills, and in presenting the results of their work orally as well as in written form.

NB. Attributes and Skills listed above are literally and largely based on the frameworks listed in 5.1. and amended to suit the FRM proposal.

5.2. MS FRM Award

The MSc FRM degree is awarded to students who have successfully completed all the requirements of the program and demonstrated, to an acceptable level, knowledge, skills and abilities related to the discipline of Financial Risk Management. In particular, candidates should have a cumulative average of 81% and pass individual courses with a grade that is not lower than 70%. All other conditions pertain to University-wide programs/awards rules as stipulated in the University catalogue.

6. Relationship with Relevant Professional Certifications

The MS FRM program is designed in a way that captures the essence of many relevant professional qualifications, in particular the FRM, CFA and JFA certifications.

7. Courses Outlines

Remedial Courses (non-business, non-economics graduates)

ACO 501 **Fundamentals of Financial Accounting; 1 cr.**

Course outline

This course covers areas in financial accounting and aims at providing students with the basic accounting fundamentals enabling them to understand financial statements that are of concern to managers. Topics in accounting include but not limited to the accounting equation, the balance sheet, the income statement, and the statement of cash flow.

Topics

- The Accounting Environment
- The Accounting Equation
- The Trial Balance
- The Balance Sheet
- The Income Statement
- The Cash Flow Statement

FIN 501 **Fundamentals of Finance; 2 cr.**

Course outline

This course covers areas in managerial finance and aims at providing students with the basic finance fundamentals enabling them to deal with issues in finance that are of concern to managers. Topics in finance cover the time value of money, risk and return, and securities valuation.

Topics

-The Finance Function
-Time Value of Money
-Risk and Return
-Stock Valuation

-Bond Valuation
-Capital Asset Pricing Model
-Cost of Capital
-Dividend Policy

Core Major Courses

FRM 620 **Derivatives 3 cr-E**

Suggested course outline

This course focuses on options and futures, derivatives, and/ or risk management at an advanced level. It presents a detailed but flexible coverage of options, futures, forwards, swaps, and risk management - as well as a solid introduction to pricing, trading, and strategy - and offers an outstanding blend of institution material, theory, and practical applications.

Suggested Topics

- Introduction to Derivatives
- Mechanics of Futures Markets
- Hedging Strategies Using Futures
- Determination of Forward and Futures Prices
- Interest Rates
- Properties of Stock options
- Binomial Tree
- The Black Scholes Merton Model
- Trading Strategies involving Options
- SWAP

FRM 625 **Advanced Investment 3 cr-E**

Suggested course outline

This course is designed to acquaint the student with the concepts of portfolio theory, portfolio management process, investment strategies and analysis with applications to the markets for equities and fixed income securities. The course discusses principles for valuing and managing financial assets such as bonds and stocks. It covers establishment of appropriate investment objectives, development and construction of portfolio strategies, estimation of risk-return tradeoffs, and evaluation of investment performance and risks. In addition, it focuses on institutional investors such as mutual funds and hedge funds, and also includes coverage of international investing.

Suggested Topics

- Risk and Return
- Bond Valuation and Management
- Common Stock Valuation and Analysis
- Efficient Market Hypothesis & the Random Walk Theory
- Capital Asset Pricing Theory
- Stock Market Anomalies
- Portfolio Construction
- Portfolio Performance and Evaluation
- Portfolio Risk, Analytical Methods and VAR

FRM 630 **Economics of Financial Markets 3 cr-E**

Suggested course outline

The Economics of Financial Markets aims to help student understand the role that financial markets play in the business environment. It also provides an understanding of the underlying institutions that either help financial markets work well or that interfere with the efficient performance of these markets. This course develops a series of applications of principles from finance and economics that explore the connection between financial markets and economy. In addition, it focuses on many public policy issues and examines how the most important players in financial markets, central banks, operate and how monetary policy is conducted in addition to possible reforms of international financial system.

Suggested Topics

- Overview of the Financial System (Analysis of all financial instruments available such as stocks, bonds, derivatives, CP, Fed rate ... and understanding the process of securitizations).
- Understanding the Securitizations of Subprime Mortgage Credit.
- The Stock Market, the theory of rational Expectations, and the Efficient Market Hypothesis.
- An Economic Analysis of Financial Structure: Systemic Risk in the Financial Sector (transaction costs, Moral Hazard and adverse selection problem in financial markets).
- Financial Crises and the Subprime Meltdown
- Economic Analysis of Financial Regulation (Asymmetric information and financial regulation, Government Safety Net, Basel 3, Mark to Market Accounting and the Subprime Financial Crisis, Financial Regulation After the Subprime Financial Crisis)
- Banking and Management of Financial Institutions (Liquidity Management, Asset management, Liability Management and Capital Adequacy Management)
- The impact of Monetary/Fiscal policy on financial institutions and stock markets.
- The international Financial System.
- The Foreign Exchange Market.

FRM 640 **Operational and Liquidity Risk Management 3 cr-E**

Suggested course outline

This course explores two major areas in risk management: operational and liquidity risks. Its covers the used techniques to estimate and calculate the risks and the risk VaR with application on real case studies. The Basel II&III frameworks are explored. Also, the dimension of leverage is analyzed and the hedge funds description together with their related risks measures are considered.

Suggested Topics

- Operational Risk and its Basel III requirements
- Estimating Liquidity Risks
- Model Risk
- Managing Operational Risk
- Calculating Operational Risk: VaR
- Six Sigma and Balanced Scorecards for process improvement
- Application of operational risk systems (Barings, AIB, etc).
- Revisions to the Basel II market Risk framework (2009)
- Liquidity Risk and Impact of Leverage
- Hedge funds and their risk measures

FRM 650 **Credit Risk Management 3 cr-E**

- Estimating Default Probabilities
- Credit Risk Measurement (ECL, credit VAR, credit metrics, etc.)
- Credit Risk Management and transferring: securitization, Cash collateralized Debt Obligations, etc.
- Credit Derivatives and credit-linked Notes
- Basel III for Credit Risk

FRM 660 **Advanced Value Risk Management 3 cr-E**

Pre-Requisite: 18 Credits

Suggested course outline

This course examines modern techniques for managing financial risks. It covers the different measurement approaches commonly used in several arenas including investing, hedging and trading. GARCH models are explored together with the EWMA for the volatility estimation and prediction. Copulas, VAR and stress testing are also studied for the optimization of strategies.

Suggested Topics

- Interest Rate Risk
- Strategies for hedging
- Volatility (GARCH, EWMA, VolSD)
- Correlations and Copulas
- Value at Risk
- Market Risk VAR: Historical Simulation Approach
- Market Risk VAR: Model Building Approach
- Scenario Analysis and Stress testing

- The Greek Letters

CORE SUPPORT COURSES

FRM 665 **Quantitative Methods for Finance 3 cr-E**

Suggested course outline

This course presents a review of the mathematical models necessary to conduct research in finance and financial risk management and to use a variety of quantitative methods to analyze data and make decisions. It starts with an appraisal of some relevant mathematical and statistical concepts including probability (discrete, continuous, marginal, conditional, joint, etc.) and probability distribution (Normal, Binomial, Poisson and exponential). Sampling and sampling distributions, confidence interval estimation, and Hypothesis testing will be covered and applied on real finance cases. Then, regression analysis and statistical inferences together with the time series and forecasting analyses will be conducted. The ultimate objective of the course is to lead students to describe large complex data sets, run regression analyses, make quantitative forecasts, create optimization models, and run simulations.

Suggested Topics

- Describing the Distribution of a single variable
- Finding Relationships among variables (Variance, SD, covariance, correlation, skweness, Kurtosis, etc.)
- Probability and Probability Distribution (discrete, continuous, marginal, conditional, joint, etc.)
- Normal, Binomial, Poisson and exponential Distributions
- Sampling and sampling Distributions
- Confidence Interval estimation
- Hypothesis Testing
- Regression Analysis: Estimating Relationships
- Regression Analysis: Statistical Inference
- Time series Analysis and Forecasting
- Introduction to Simulation Modeling
- Simulation Models

FRM 680 **Finance Research Methods 3 cr-E**

- Background
- The Scientific Method
- Ethics in Research
- Elements of a Research Study
- Measures and Scales
- The Literature Review and Critique
- Positivist versus Phenomenological Research
- Research Strategies (Surveys, Case Studies, Experiments and Action Research)
- Research Methodologies (Questionnaires, Interviews, Focus Groups, Content Analysis and Observation)
- Threats to Reliability and Validity
- Assumptions for Quantitative Analysis

RESEARCH COMPONENT

FRM 690 **MS Thesis 6 cr-E**

Pre-requisites: FRM 665 and FRM 680

The MS Thesis is a scholarly research study of Finance topic preferably related to Financial and/or Operational Risk Management, that is grounded in relevant theories and which uses advanced quantitative/qualitative data analysis techniques. Based on a research proposal approved by the Thesis Committee, the MS Thesis culminates in a report of a minimum of 15,000 words. Graduating students should satisfactorily defend the research design and findings before a grade could be assigned. Although not a requirement for graduation, students are expected to submit their work for publication in refereed conference proceedings and/or esteemed journals.

Faculty of Business Administration and Economics
Revised Master of Business Administration Program

Approved by the BOD on March 6, 2013
Approved by the UC on June 25, 2013

1. Rationale

The current MBA curriculum was revised and put into practice in Fall 2010. After three years of implementation and after setting the new mission as well as the program goals and learning outcomes, the Graduate Committee reviewed the MBA program, taking into consideration the existing deficiencies as requested by Dean Elie Menassa. The objective for this amendment is to offer a more solid MBA that conforms to international and accreditation standards, as reflected in the ETS Major Field Tests. The proposed degree is MBA; a student, guided by his advisor, can opt for an emphasis area by selecting specific *Professional Enhancement Courses (as per the* University of North Carolina model) in *Finance* or *Human Resources Management* or he/she can choose these courses from the different areas of emphasis (as *Elective courses*) and opt for a *General MBA*. This choice will only appear in the transcript of grades. Subject to proper approvals, the implementation of the new MBA curriculum should be as of Fall 2013.

2. MBA Mission Statement

Consistent with the Faculty mission, the MBA program at Notre Dame University-Louaize aims at providing aspiring candidates, of various professional and educational backgrounds, with a set of theoretical knowledge and technical skills allowing them to make ***informed business decisions in a socially responsible manner****. The program equips them with the competencies necessary to advance in their careers or pursue further education, as well as be active players in local, regional and international markets.*

Following the reviewed mission, the identity of the new MBA Program encompasses two interconnected key identifiers: *Socially Responsible* *Decision-Making* Ability of graduates. Accordingly, the program's learning goals and outcomes as well as the proposed courses and their topics reflect the new identity.

3. MBA Program Learning Goals and Outcomes

The following categorization of learning goals and outcomes reflect the categories stipulated by AACSB accreditation.

General Skills

Goal 1: our graduates will demonstrate socially responsible professionalism.

Outcomes: by the end of the program graduates will be able to:

1.1.: Identify and assess ethical dilemmas and propose appropriate courses of action

1.2.: Behave pragmatically and in an informed manner

1.3.: Demonstrate leadership traits of a professional individual

1.4.: Perform effectively as a team member toward the achievement of a common goal

1.5.: consider socio-environmental concerns in the decision making process

1.5.: Communicate effectively

Management Specific Skills

Goal 2: our graduates will demonstrate the ability to apply theoretical knowledge to business-related challenges in a dynamic environment.

Outcomes: by the end of the program graduates will be able to:

2.1: Identify various management functions

2.2.: Evaluate decision alternatives and select between competing courses of action

2.3.: Assess businesses' internal resources and capabilities as an integral part of business planning

2.4.: Appraise the impact of external macro-environmental factors on the decision - making process

2.5.: Integrate the program multi-disciplinary knowledge in providing business solutions

2.6.: Use information technology in the decision-making process and in conducting research.

Research Skills

Goal 3: our graduates will demonstrate ability to engage in business research.

Outcomes: by the end of the program graduates will be able to:

3.1.: Relate existing theories to research propositions.

3.2.: Understand and use the scientific method in social research.

3.3.: Plan, develop and write academic research and professional reports.

4. Revised Admission Requirements

Admission to the MBA program is based on weighted criteria. The sum of the weighted values would constitute a composite score. The composite score will then be used to admit, reject or place a student on probation in preparatory levels. The new selection process would be based on an empirically substantiated algorithm. The selection depends on three widely used variables that universities around the world, particularly in the US, use as criteria for admittance in addition to passing the fluency test in the English language. The English language test (NDU English Entrance Test), the TOEFL or Writing section of SAT I will be required from any applicant seeking admission and whose undergraduate degree is from a university which language of instruction is not English. The criteria used for the composite score are:

- GMAT
- Undergraduate overall GPA and university of origin
- CV, professional experience & Interview

4.1. Procedure for Establishing Weights: Description of the Algorithm Model

The algorithm described below, shows how weights were obtained for the three selected admission criteria.

4.1.1. Standardization of Undergraduate GPA

Undergraduate GPAs were standardized because the grading system in Lebanon differs between universities following the French system and those following the American one, or others labeled as the French-English system. In addition, within a same system (referred here as "university of Origin") GPA calculation differs. Thus, to counter this problem, GPAs were standardized as follows:

For the main universities in Lebanon:

Step 1:

The undergraduate GPA was **standardized** and a ***z* score** was calculated by using the targeted mean and standard deviation that was derived from the previously "admitted/rejected" data since fall 2011 of the graduate division.

N.B.: *The purpose of standardizing the data is to avoid the double count of GPA on one hand, and "university of origin" on the other hand, and also to reduce the subjectivity in allocating grades randomly to a list of pre-categorized universities.*

Step 2:
The ***z score*** was then converted **to a nonstandard normal distribution** and subsequently to a percentage score.

Step 3:
Data was aggregated for all the universities (based on the sample provided) into one standardized percentage GPA. The method in this study used regression to predict the third semester — after enrollment — cumulative GPA. The obtained data was for students who were accepted and enrolled, whereas the data pertaining to those that were not accepted was not included in the analysis. The data-set was then organized in a spreadsheet file on excel.

4.1.2. Generation of the Regression Equations to predict University Grade Point Average:

Two different regression equations will be generated:

- The first will include two variables: undergraduate GPA and GMAT scores (or GPA and GRE converted score) .
- The second regression will include three variables: undergraduate GPA, GMAT, and CV & interview scores.

The undergraduate GPA and GMAT scores would be regressed on the second semester grade point average[5] (GPA). To this end, a composite score that respects the below constraints will be drawn:

Remedy the heterogeneity of students in terms of which university of origin they come from (see above suggested solution).
Maintain a margin of flexibility for the Graduate Admission Committee's decision by allocating an almost significant weight on the CV (experience, exposure, etc.) and the interview.
Eliminate the double use of criteria.
Respect the previous pattern of acceptance.

Composite Score = 40%Undergraduate GPA+ 30%GMAT+30%CV&Interview

After trying the new composite score, the model was found to be coherent and solid, and the output turned out to be homogeneous. The suggested cut-off points for this Composite Score (CS) are:

- CS below 55: rejected.
- CS between 55 and 65: admitted conditionally.

[5] The third semester is set as our benchmark because it gives an indication to the concept "acculturation" in academic life and thus would indicate whether students would continue or not.

- CS above 65: admitted.

Students that are admitted conditionally and students with a non- business/economics background that are admitted must take preparatory courses as described below under the Foundation courses.

In order to calculate the composite score, all the applicants' files will be studied by the Graduate Committee. In addition, the GMAT requirement could be given a lower weight in favor of "CV, Professional Experience, and Interview" (in the Composite Score) in case an applicant possesses about four years of experience at an executive level.

5. The Structure

The new MBA Program consists of 39 credits of courses; it comprises:

Two Foundation (Pre-MBA/preparatory) courses: a total of 3 non-earned credits
Seven Major Core Courses: 21 credits
Two Support Core Courses: 6 credits
One Graduate Research Report: Graduate Thesis of 6 credits or Graduate Applied Project of 3 credits.

And
Two Professional Enhancement Courses (Emphasis): 6 credits (with a Graduate Thesis) – OR
Three Professional Enhancement Courses (Emphasis): 9 credits (with a Graduate Applied Project) – OR
Three Elective Courses: 9 credits (with a Graduate Applied Project for students opting for a general degree in Business Administration with no emphasis (General MBA).

Foundation courses

The foundation courses aim at equipping applicants from a non-business/economics background with a minimum level of knowledge pertaining to business studies.

ACO 501 Fundamentals of Financial Accounting; 1Cr.

Course outline

This course covers areas in financial accounting and aims at providing students with the basic accounting fundamentals enabling them to understand financial statements that are of concern to managers. Topics in accounting include but not limited to the accounting equation, the balance sheet, the income statement, and the statement of cash flow.

Topics
- The Accounting Environment
- The Accounting Equation
- The Trial Balance
- The Balance Sheet
- The Income Statement
- The Cash Flow Statement

FIN 501 Fundamentals of Finance; 2Cr.

Course outline

This course covers areas in managerial finance and aims at providing students with the basic finance fundamentals enabling them to deal with issues in finance that are of concern to managers. Topics in finance cover the time value of money, risk and return, and securities valuation.

Topics
-The Finance Function
-Time Value of Money
-Risk and Return
-Stock Valuation
-Bond Valuation
-Capital Asset Pricing Model
-Cost of Capital
-Dividend Policy

The student does not earn credits for the foundation courses. However, the passing grade is **B** (81%) and the course can be repeated only once – i.e. failing to pass a course for the second time leads to a dismissal from the MBA program. Moreover, students can concurrently register a non-related graduate course to Accounting or Finance. In this case, the maximum number of credits cannot exceed 6 cr. inclusive of the foundation course(s).

Major core courses

There are seven major core courses that equip students with a solid base in the MBA program. These courses are as follows:

ACO 620 Accounting for Managerial Decision Making; 3Cr.
Prerequisite: ACO 501 or Equivalent

Course outline
Business decisions are mostly based on accounting records and success is usually measured in financial terms. This course is directly concerned with those managerial aspects related to the use of accounting information to make sound and informed short-term and long-term calculated decisions. Topics include categorizing relevant costs, costing systems, and cost-volume-profit relationship. Special attention is also drawn to profit planning and budgetary control, pricing products and services, and measuring and managing customer relationships and life cycle costs. This course will also develop graduate students' ability to analyze the published statements of corporations.

Topics
Ethical Decision-Making and The Changing Business Environment
Cost Types and Behavior
Job Order and Process Costing
Activity Based Costing
Cost-Volume-Profit Relationship
Life Cycle Costs
Managing Customer relationships
Pricing Strategies
Transfer Pricing
Balance Scorecards
Budgeting and Performance Management

Financial Statements Analysis

ECN 620 Economics for Business Decision-Making; 3Cr.

Course outline

Economics deals with real world issues and microeconomic analysis is the heart of economics and the key to its application in the world of business. From this perspective, this course introduces MBA students to the application of economic models and economic reasoning to making managerial decisions in both the private and public sectors. Topics include but not limited to optimization techniques, market structures, and pricing models.

Topics

Optimization Techniques: Finding the Best Solution for Business Decisions - a Marginal Analysis for Optimal Decisions

The Foundation for Business Success: Understanding Demand, Supply and Market Equilibrium Elasticity Concept and Demand

Basic Estimation Techniques: Building Business and Economic Models (linear / Non-linear Regression Analysis and Model Building)

Demand Estimation and Forecasting (Exponential Smoothing, Time Series Decomposition, Regression Models)

Production and Technology (Production Functions, Three Important Measures of production, Three Stages of Production, Optimal Combination of Inputs, Isoquant/Isocost, Returns to Scale, Cobb-Douglas Production Functions)

Cost Analysis for Business Decisions: Explicit and Implicit Costs, Opportunity Cost, Relevant Costs for Business Decisions, Costs Result from Production, Short-Run Production and Costs, Short-Run Costs Per Unit of Output, Costs in the Long-Run, Economies / Diseconomies of Scale, Break-Even Analysis

Market Structure and Pricing: Perfect / Imperfect Competition Models

The Economies of Investment and Finance: Risk / Uncertainty, Probability Concepts and the Expected Value, Measurement of Risk, Risk Aversion and Risk Preference, Risk and Capital Budgeting: Risk-Adjusted Discount Rate and Certainty Equivalent Factors, Decision Trees, Game Theory and Decisions Under Uncertainty

Further Analysis of Pricing Decisions

FIN 620 Corporate Finance and Investment Decisions; 3Cr.
Prerequisites: FIN 501 or Equivalent

Course outline

This course takes a practical look at the cores of corporate financial management and investment decisions. It treats the principal topics and issues that are of concern to financial managers of modern organizations. These include but not limited to capital budgeting, capital structure, financing instruments, and derivatives.

Topics

The Finance Function
Common Ethical Rules for Finance Managers
Securities Valuation
Capital Budgeting
Cost of Capital
Capital Structure
Dividend Policy
International Finance

Financing Instruments and Derivatives
Capital and Money Markets
Market Efficiency

MGT 620 Modern Corporate Management; 3Cr.

Course outline

This course aims to provide MBA candidates with a broad theoretical and practical understanding of some key concepts in modern corporate management. To achieve this aim, its looks at these concepts from three separate but interrelated lenses: organizational theory, organizational behavior, and human resource management. Topics include but not limited to organizational structure design, organizational change and development, leadership in organizations, motivation, recruitment and selection, and training and development.

Topics

The Role of The Manager
Ethical, Sustainable Management and Corporate Social Responsibility
Leadership
Team Building and Management
Managing Conflicts
Negotiation Skills
Motivation and Employees Satisfaction
Employment Planning and Recruiting
Training and Development
Organizational Structure Design
Organizational Change
Entrepreneurship/Small Business Management

MGT 630 Operations and Supply Chain Management; 3Cr.
Prerequisites: MGT 620

Course outline

Operations management is critical to ensure a smooth running of the supply chain and to deliver value to customers and the business as a whole within its overall strategy. This course examines the different frameworks for designing, diagnosing and improving operations and thereby, contributing in creating and sustaining a competitive edge in the workplace. Topics include but not limited to operations design, capacity planning and control, scheduling, supply chain logistics, and quality control and continuous improvement.

Topics

Operations Design
Inventory Management
Capacity Planning
Layout Strategies
Forecasting Techniques
Scheduling
Just in Time
Lean operations
Service Management
Linear Programming
Quality Control and Process Management

MGT 640 Corporate Strategic Planning; 3Cr.
Prerequisites: FIN 620, MGT 620 and MRK 620

Course outline

This is a capstone course integrating the various concepts and skills taught in the other business courses. It focuses on strategic planning and business policy formulation and implementation. Strategic Planning is viewed as the process by which an organization maintains its competitiveness within its work environment by determining its present business position, where it wants to go, and how it wishes to get there. This is done by identifying business resources and competitive capabilities, and directs these resources towards gaining sustainable competitive advantages. The course treats also modern strategic perspectives such as global strategic planning, corporate governance and sustainable strategies, strategic games and business thinking.

Topics

The Strategic Planning Process
External Strategic Audit
Internal Strategic Audit
Strategic Choice Options
Strategy Implementation
Strategy Control and Evaluation
Global Strategic Planning
Strategic Planning for The Not-for-Profit Organizations
Corporate Social Responsibility and Sustainable Strategies
Games of Strategy
Business thinking

MRK 620 Marketing Management; 3Cr.

Course outline

This course aims to develop the MBA candidates' critical understanding of the marketing function and its contribution to the success of an organization. It discusses and applies ideas in the areas of marketing planning, market research, consumer behavior and strategic marketing. Topics include but not limited to environment scanning and marketing planning, consumer and business purchasing processes, target markets and promotion, competitive intelligence and managerial decision making.

Topics

The Marketing Function
Environment Scanning and Marketing Planning
Consumer and Business Purchasing Processes
Market Segmentation and Targeting
Pricing
Promotion
Channels of Distribution
Competitive Intelligence
Metrics and Control Mechanisms

Support core courses

The two support core courses are designed to equip students with numeracy and applied research skills. These courses are:

QMT 665 Quantitative Methods for Business; 3Cr.

Course outline

This course is a survey of multivariate data analysis techniques as applied to business problems. It aims at equipping MBA candidates with the necessary knowledge and skills to analyze complex data for sound decision-making. Topics include but not limited to statistical inferential methods, time series and forecasting techniques. The focus is on application rather than theoretical derivation.

Suggested Topics

- Types of Multivariate Techniques
- Data Preparation
- Factor Analysis
- Multiple Regression Analysis
- The Logistic/Multinomial Regression
- Multivariate Analysis of Variance
- Conjoint Analysis
- Cluster Analysis

BUS 668 Research Methodology for Business; 3Cr.
Prerequisites: FIN 620, MGT 620, MRK 620 and QMT 665 (prerequisite / co-requisite)

Course outline

This course views research as a strategic activity that occurs within the context of limited resources and within a framework of ethical, legal, and social constraints. It is at a graduate level in the theory and practice of social science research as applied to business problems. The focus is on available research strategies and methods and their application to the development of a formal research design leading to successful implementation of research projects. MBA candidates will also be introduced to the conventions of reporting research and receive guidance in relation to the structure and format of their graduate reports and theses.

Topics

Philosophical Background
The Scientific Method
Ethics in Research
Elements of a Research Study
Measures and Scales
The Literature Review and Critique
Positivist versus Phenomenological Research
Research Strategies (Surveys, Case Studies, Experiments and Action Research)
Research Methodologies (Questionnaires, Interviews, Focus Groups, Content Analysis and Observation)
Threats to Reliability and Validity
Assumptions for Quantitative Analysis

Graduate research report

In addition to the Support Core Courses, and as part of fulfilling the NDU's MBA requirements, MBA candidates will either complete 12 taught courses (36 credits) in addition to a Graduate

Applied Project that is equivalent to 3 credits, or complete 11 courses (33 credits) plus an MBA Thesis (6 credits).

BUS 680 Graduate Applied Project; 3Cr.
Prerequisites: QMT 665 and BUS 668

A Graduate Applied Report yields a written report culminating from the systematic study of a significant problem in the field of business. It identifies the problem, states the major assumptions, explains the significance of the undertaking, sets forth the sources for and methods of gathering information, analyzes the data and offers conclusions, identifies limitations and suggest recommendations. This can be a group effort of a maximum of 2 students per group. Any full-time/part-time faculty member at the FBAE may serve as a supervisor subject to Dean's approval. Students produce a structured report based on a research proposal that was submitted earlier to the Graduate Division within four weeks from the time of registration.

Or

BUS 690 Thesis; 6Cr.
Prerequisites: QMT 665 and BUS 668

An MBA Thesis is a significant contribution to knowledge which shows a critical appreciation of existing knowledge in the field. The work must be communicated coherently in a thesis presented in a critical, literary and orderly way, and must show evidence of adequate analysis and discussion of results. This is an individual work. Only full-time faculty members can act as supervisors. Students produce a structured report based on a research proposal that was submitted earlier to the Graduate Division within four weeks from the time of registration.

Professional Enhancement/Elective courses

Two or three courses falling in one emphasis (Finance or Human Resources Management) or in different areas should be selected from the Professional Enhancement/Elective courses depending on whether the option chosen from the Graduate Research Report is a Thesis or a Graduate Applied Project, respectively.

FIN 625 Commercial Bank Financial Management; 3Cr.
Prerequisite: FIN 620

Course outline

The objective of this course is to equip students with theoretical principles and technical tools that allow them to:

Understand sources and uses of bank funds and the risk of banking.
Manipulate economic models of bank performance and valuation.
Operate the bank's Asset-Liability Management and interest rate risk.
Study the capital and dividend management.
Understand the traditional approach to business lending and in order to use modern methods for analyzing and managing credit.
Assess the liquidity risk and apply liquidity management.
Analyze the operational risk, securitization, and derivatives activities within banks.

Topics

Bank Financial Statements, Risks, and Valuation

Analyzing Bank Performance
Managing Non-interest Income and Non-interest Expense
Determinants of Interest Rates
Strategic Planning, Risk Management, Asset-Liability Management, and Capital Adequacy
Managing Interest Rate Risk: GAP and Earnings Sensitivity
Managing Interest Rate Risk: Duration Gap and Market Value Of Equity
Financial Futures, Forward Rate Agreements, and Interest Rate Swaps
Options, Caps, Floors, and More Complex Swaps
Liquidity Planning: Managing Short Term Liabilities and Cash Assets
The Effective Use of Capital
Credit Risk: Traditional and Innovative Methods for Managing the Lending Function
Overview of Credit Policy and Loan Characteristics

FIN 627 Derivatives; 3Cr.
Prerequisite: FIN 620

Course outline

This course focuses on options and futures derivatives, and risk management at an advanced level. It presents a detailed but flexible coverage of options, futures, forwards, swaps (including interest rate, currency, and equity swaps), and risk management — as well as a solid introduction to pricing, trading, and strategies — and offers a strong blend of institution material, theory, and practical applications.

Topics

Derivatives Markets and Instruments
The Structure of Options Markets
Principles of Option Pricing
Option Pricing Models: The Binomial Model
Option Pricing Models: The Black-Scholes Model
Basic Option Strategies
Advanced Option Strategies
The Structure of Forwards and Futures Markets
Principles of Pricing Forwards, Futures, and Options on Futures
Swaps
Interest Rates Forwards and Options
Financial Risk Management Techniques and Applications

FIN 629 Investment; 3Cr.
Prerequisite: FIN 620

Course outline

The focus of this course is on financial theory and empirical evidence for making investment decisions. Topics include: portfolio theory, equilibrium models of security prices (including the capital asset pricing model and the arbitrage pricing theory); the empirical behavior of security prices; market efficiency; performance evaluation; and behavioral finance.

Topics

Financial Theories

This includes portfolio theory, the capital asset pricing model and the arbitrage pricing theory, all of which have become an integrated part of the decision-making in investments.

Empirical Evidence in the Equity and Equity Options Markets

This includes patterns in cross-sections of stock returns, the time-series behavior of stock returns

time-varying expected returns and volatility, and further empirical evidence from the equity options market.

Introduction to Fixed-Income and Credit Sensitive Instruments

This includes default-free as well as defaultable bonds, yield curve analysis, the effect of Fed target rates, fixed-income derivatives such as swaps, caps, floors, and swaptions, models of default and ratings transitions, and more recent development of credit derivatives.

Brief Introduction to Behavioral Finance (one session):

This topic will be covered by just one lecture, the main purpose of which is to get students exposed to this active and fast growing field in Finance.

HRM 625 Human Resources Development; 3Cr.
Prerequisite: MGT 620

Course outline

This course examines the primary role of human resources development (HRD) in the organization to help people and organizations effectively manage change. The course focuses on strategies for assessing, designing, and implementing training and organizational development efforts that positively impact the performance of the individual and the work group. The course also provides an overview of change interventions, including training and staff development; succession planning and performance management; factors that affect HRD; and the trends in HRD, such as human performance technology and the work out process model.

Topics

Current trends in HR and training
Leading and managing change
Performance management
Training programs
Succession plans
Motivation and employee
Engagement
Career development
Coaching and mentoring
Leadership development

HRM 627 Employee Resourcing; 3Cr.
Prerequisite: MGT 620

Course outline

The course is concerned with the range of methods and approaches used by employers in resourcing their organizations in such a way as to enable them to meet their key goals. It involves staffing (recruitment, selection, retention and dismissal), performance (appraisal and management of performance), administration (policy development, procedural development, documentation) and change management.

Topics

The context of employee resourcing.
The strategic significance of employee resourcing.
Approaches to employee resourcing.
Human resource planning.
Recruitment and selection.

Performance management.
Career and talent management.
The changing context of employee resourcing: beyond boundaries

HRM 629 Performance and Compensation Management; 3Cr.
Prerequisite: MGT 620

Course outline
This course familiarizes students with the concepts of compensation management within the wider context of human resource management. It provides students with an understanding of the reward management process which includes pay survey, job evaluation, and the design of pay structure. Students will acquire basic data management techniques and recognize what are the factors that determine the pay levels and benefits of employees in the job market. Students will be aware of the problems related to performance management system and be able to give suggestions for improvement. The concept of equal opportunity in compensation and performance management will be emphasized throughout the course.

Topics
Theories and Concepts
Compensation system within an organization
Concept and elements of a total compensation package
Behavioral science theories and models relating to compensation management
Compensation Strategies
Organization and external factors affecting compensation strategies
Compensation strategies as integral part of human resource management
Development of compensation policies and strategies
Identification of Job Value and Pay Structures
Job-based structures and person-based structures
Job evaluation process
Problems involved in job evaluation
Designing pay structures
Comparison and evaluation of different types of pay structures
The application of information technology in pay structure design
Performance Management
Performance management
Performance appraisal and measurement
Pay-for-performance Plans

MGT 625 International Business Management; 3Cr.
Prerequisite: MGT 620 and MRK 620

Course outline
The course aims at providing students with an operational perspective of the global business environment. While opening up horizons, emphasis will be on providing incentives and pre-requisites for effective, executive strategies to go international. The course ultimately explores the strategic context and operational determinants for cross-border commerce and the role of location, international competition, comparative macroeconomics, multinational corporate organizations, multiculturalism, cross-national alliances, and international mergers and acquisitions.

Topics

Regional and global business environment
International PESTEL analysis
International market places and business centers
Multicultural management
International operations management
International monetary system and financial management
International marketing management
International HR and labor management
International business strategies
International production strategies
Negotiating international businesses
Corporate ethics and global competitiveness

MGT 627 Organizational Behavior and Change Management; 3Cr.
Prerequisite: MGT 620

Course outline

Organizational behavior – OB - investigates the impact individuals, groups and structure have on behavior and performance within organizations. Responding timely and effectively to dynamic environmental demands requires a good operational understanding of individual and group dynamics, values, needs and attitudes, perceptions and motivations, power politics and conflicts at work. OB is concerned with what people do in organizations and how that behavior affects performance.

Topics

Organizational structure and culture
Teams versus individual behavior
Power and politics
Attitudes and satisfaction
Motivation
Human resources policies
Leadership and decision making
Organizational communication
Conflict management and negotiations
Change and stress management
Change and Learning organizations
OB in family businesses

MGT 629 Entrepreneurship and Small Business Management; 3Cr.
Prerequisites: MGT 620 and MGT 640

Course outline

This course examines the peculiar attitude, skills and behavior needed for successful launching of new ventures and managing of small businesses, the backbone of modern economies. Aimed for those with a desire to become entrepreneurs, work in start-ups, or develop careers in consultancy, venture capitals and investment banking, the course studies the best practices that foster innovation and new business development in independent or corporate settings. Referring extensively to business case examples and the experience of creative guest speakers, students will conduct analyses of new venture ideas and comprehensive transformation business plans.

Topics

Traits and qualities of entrepreneurs
Characteristics of small and start-up businesses
Concept and new product development
Time to market
Technology-based innovations
Managing strategic change and transformations
Mistakes and best practices in entrepreneurship
Small business organization and management
Functional management considerations in small businesses
Business plan development and communication
Venture and small business culture
Joint ventures and alliances
Social responsibility in innovations

MRK 625 Service Management and Marketing; 3Cr.
Prerequisite: MRK 620

Course outline

The course aims at highlighting the service and relationship imperative with respect to any offering made to the market. Students are expected to develop conceptual and operational knowledge in the contemporary business paradigm stressing the service dimension while aiming at achieving sustainable business performance through customer satisfaction.

Topics

The service logic dimension
Managing in service-led competition
Service and the bottom-line
Consumer behavior in the service context
Customer expectations and perceptions
Managing people for service
Customer relationship management
Service recovery
Managing brand relationship and image
Social responsibility in the service culture

The Degree of Master of Business Administration
Contract Sheet - Emphasis: Finance

I. Preparatory Course (unearned 3 Cr.)

ACO	501	Fundamentals of Financial Accounting	1 cr.
FIN	501	Fundamentals of Finance	2 cr.

II. Major Core Courses (21 Cr.)

ACO	620	Accounting for Managerial Decision Making	3 cr.
ECN	620	Economics for Business Decision Making	3 cr.
FIN	620	Corporate Finance and Investment Decisions	3 cr.
MGT	620	Modern Corporate Management	3 cr.
MGT	630	Operations and Supply Chain Management	3 cr.
MGT	640	Corporate Strategic Planning	3 cr.
MRK	620	Marketing Management	3 cr.

III. Support Core Courses (6 Cr.)

BUS	668	Research Methodology for Business	3 cr.
QMT	665	Quantitative Methods for Business	3 cr.

IV. Graduate Research Report (3 Cr. or 6 Cr.)

BUS	680	Graduate Applied Project	3 cr.
or			
BUS	690	Thesis	6 cr.

V. Professional Enhancement/Elective Courses (9 Cr. if BUS 680 or 6 Cr. if BUS 690)

FIN	625	Commercial Bank Financial Management	3cr.
FIN	627	Derivatives	3 cr.
FIN	629	Investment	3 cr.

The Degree of Master of Business Administration
Contract Sheet - Emphasis: Human Resources

I. Preparatory Course (unearned 3 Cr.)

ACO	501	Fundamentals of Financial Accounting	1 cr.
FIN	501	Fundamentals of Finance	2 cr.

II. Major Core Courses (21 Cr.)

ACO	620	Accounting for Managerial Decision Making	3 cr.
ECN	620	Economics for Business Decision Making	3 cr.
FIN	620	Corporate Finance and Investment Decisions	3 cr.
MGT	620	Modern Corporate Management	3 cr.
MGT	630	Operations and Supply Chain Management	3 cr.
MGT	640	Corporate Strategic Planning	3 cr.
MRK	620	Marketing Management	3 cr.

III. Support Core Courses (6 Cr.)

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BUS	680	Graduate Applied Project	3 cr.
or			
BUS	690	Thesis	6 cr.

V. Professional Enhancement/Elective Courses (9 Cr. if BUS 680 or 6 Cr. if BUS 690)

HRM	625	Human Resources Development	3 cr.
HRM	627	Employee Resourcing	3 cr.
HRM	629	Performance and Compensation Management	3 cr.

The Degree of Master of Business Administration
Contract Sheet

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FIN	627	Derivatives	3 cr.
FIN	629	Investment	3 cr.
HRM	625	Human Resources Development	3 cr.
HRM	627	Employee Resourcing	3 cr.
HRM	629	Performance and Compensation Management	3 cr.
MGT	625	International Business Management	3 cr.
MGT	627	Organizational Behavior and Change Management	3 cr.
MGT	629	Entrepreneurship and Small Business Management	3 cr.
MRK	625	Service Management and Marketing	3 cr.

Course Substitutions from Old to New Proposed Program

OLD Contract Sheet	Substitutions (New Contract Sheet)
ACO 602 Managerial Accounting	ACO 620 Accounting for Managerial Decision Making
BAD 602 Business and Marketing Management	MGT 640 Corporate Strategic Management
BAF 602 Managerial Finance	FIN 620 Corporate Finance and Investment Decisions
BRM 612 Business Research Methods	BUS 668 Research Methodologies for Business
ECN 602 Managerial Economics	ECN 620 Economics for Business Decision Making

MANAGEMENT AND MARKETING CONCENTRATION

BAD 604 Organizational Behavior	MGT 627 Organizational Behavior and Change Management
BAD 606 Leadership and Change Management	MGT 620 Modern Corporate Management
BAD 608 Entrepreneurship & Small Business Management	MGT 629 Entrepreneurship & Small Business Management
BAD 610 Intercultural Management	MGT 625 International Business Management
MRK 604 Consumer Behavior and Rights	MRK 620 Marketing Management
MRK 606 Retail Management	MRK 625 Service Management and Marketing
MRK 608 Customer Relationship Management	MRK 625 Service Management and Marketing
MRK 610 Sales Force and Sales Promotion	MRK 620 Marketing Management

FINANCE AND ECONOMICS CONCENTRATION

BAF 610 Derivatives	FIN 627 Derivatives
ECN 604 Applied Econometrics	QMT 665 Quantitative Methods for Business

HUMAN RESOURCES MANAGEMENT CONCENTRATION

HRM 604 Recruitment, Selection and Performance Management	HRM 627 Employee Resourcing
HRM 608 Strategic Human Resources Development	HRM 625 Human Resources Development

Final Report of the
Ad-Hoc Committee on Data Access Policy

Approved by the UC on June 6, 2012

DATA ACCESS POLICY
FOR
NOTRE DAME UNIVERSITY

Committee Members:
Dr. George Abdelnour

Dr. Fouad Chedid

Mrs. Norma Frayha

Mrs. Leslie Alter Hage

Dr. George Hassoun (Chair)

TABLE OF CONTENTS

ABSTRACT

This report describes the work of the Committee on Data Access Policies over the period extending from February to July, 2011. Appointed by the President of NDU, Fr. Walid Moussa, for the purpose of drafting "policies and procedures required for a proper implementation of the coordinated model proposed in the Academic Steering Committee report," this committee distributed its work over three different phases. In the first phase, generic data access stakeholders such as Data Trustees and Data Stewards were specified and matched to administrative positions at NDU. In the second phase, data categories were defined and data types at NDU were assigned to appropriate data categories based on specific criteria. And in the third phase, a Data Access Policy for NDU was drafted, based on a comparative study of data access policies adopted in five representative higher education institutions. Composed of twelve statements, defining three data categories and describing the duties of four types of data stakeholders, the Policy turned out to be clear, brief, and simple, in addition to being deterministic, hierarchical, and well structured. The Policy was supplemented with three appendices: a 27-term glossary, a table specifying four Data Trustees and twenty six Data Stewards at NDU, and a sample list of safe computing standards.

1. INTRODUCTION

On January 12, 2011, the Ad-Hoc Committee on Data Access Policies (CDAP) was appointed by the President of Notre Dame University - Louaize (NDU), as one of three Ad-Hoc Committees on data management and access at NDU. Based on the memorandum of appointment, the CDAP "is requested to draft all policies and procedures required for a proper implementation of the Coordinated Model proposed in the ASC [Academic Steering Committee] Subcommittee report" [1]. Among CDAP tasks are the specification of data categories, the specification of data handlers/stakeholders along with their roles and responsibilities, and the drafting of data-related policies and procedures.

In parallel with the CDAP, an Ad-Hoc Committee on Data Types, Data Identifiers, and KPIs (CDTDIKPI) was appointed by the Presidential memorandum for the purpose of defining a structure for the NDU database, and selecting an initial set of Key Performance Indicators (KPI).

Based on the memorandum of appointment, the CDAP task timeline and recommendations are to be submitted in writing to the Ad-Hoc Advisory Committee on Data (ACD) whose comments need to be taken into account before the submission of the final report to the Office of the President.

After thirteen meetings of CDAP members, one meeting between the CDAP, the CDTDIKPI, and the Assistant to the President Dr. Roger Hajjar, three meetings between the CDAP and the ACD, and numerous informal discussions between the CDAP and CDTDKPI, this report describes the work of the CDAP from January to July 2011, starting with the preparation of a task timeline, passing by the preparation of three different progress reports, the contribution to the preparation of a data-related questionnaire for NDU administrators, the consultation of numerous reports on data access policies of higher education institutions, and getting finally to the drafting of a Data Access Policy for NDU.

Before embarking on the work description, however, it is useful to shed some light on the Coordinated Model for data access and on the definition of a number of data-related terms.

2. COORDINATED MODEL FOR DATA ACCESS

The Coordinated Model for Data Access is one of three popular models described in the ASC Subcommittee report [1, p. 8 – 9], targeting the proper management of institutional data at higher education institutions. A large number of universities adopt this model, or one of its variants, including the University of Loyola Marymount [2], the Virginia Polytechnic Institute and State University [3], and the University of South Carolina [4].

In contrast with the Centralized Model for data access, the Coordinated Model is based on the coordination among a number of key university officials including *Data Trustees*, *Data Stewards*, *Data Processors*, *and Data Experts*, in addition to a *Chief Security Officer*. These key officials, and general data users, grouped in the ASC Subcommittee report [1] under the title of *Data Handlers*, are well defined in the available literature, in terms of generic university administrative and academic positions. In the same literature, it is also possible to find the generic roles and responsibilities of these *Data Handlers/Stakeholders*.

3. DEFINITIONS: INSTITUTIONAL DATA, DATA TYPES, AND DATA CATEGORIES

In a higher education environment, many types of data can be identified, depending on their nature and field, including academic data related to students' scholastic achievements and instructors' qualifications, administrative data related to the university administration, and financial data related to funding and finances, to name just a few. In addition, each type of data or part thereof can be assigned a security attribute, such as Restricted, Limited Access, or Public, based on the level of its sensitivity and protection. In the following, some of the definitions relating to data types and data categories are highlighted.

3.1 Data (or Institutional Data)

Although some higher education institutions restrict the definition of *Institutional Data* to "shared information … relevant to planning, managing, or auditing a major administrative function of the University …" [5], the CDAP team preferred to cover a wider spectrum of data by defining *institutional data* as "information stored in print or electronic format that is used in support of the functions of the

Institution (University), by members of the University community, including administrators, faculty members, staff, students, alumni, guests, and visitors."

3.2 Institutional (or University) Database

This is a database where Institutional Data is stored under the custody and supervision of the Data Custodian. The flow of data from and into the database is typically managed in coordination between Data Stewards and the Data Custodian.

3.3 Data Types

In this document, a Data Type refers to the nature of data and the field in which it is used. Typical institutional data types include but are not limited to:

a. **Academic Data:** student-related (admissions, personal status, registration), faculty data (qualifications, teaching, service), course data, faculty instruction data, library data.

b. **Non-academic Student Data:** student housing, medical, counseling, disciplinary.

c. **Administrative Data:** human resources, facilities, services, maintenance, construction.

d. **Financial Data:** payroll, financial aid, expenditures, revenues.

e. **Research and Development Data:** faculty research data, research centers' data, publications data, alumni data, international affairs data.

3.4 Data Categories

Regardless of the data type, a security category can be assigned to data elements (items, extracts and views). Typical data categories are:

a. **Public Data**: all data that is widely available for public use with no restrictions. The volume of this category of data is to be maximized through the reduction of unnecessary limitations, in line with the principles of transparency and data availability. Examples of this category of data are the NDU Catalog and the publications of the NDU Press.

b. **Limited Access Data:** this is the default data category, deemed by the corresponding Data Steward to be inappropriate for public access. It is made available only to a specific group of University community members, based on their job descriptions. Non-personal student admission and registration data are examples of limited access data.

c. **Restricted Data:** Data protected by law or considered critical to University operations. Protected health information, non-public personal information, and personally identifiable information are examples of restricted data.

4. CDAP TASK TIMELINE

Soon after the appointment of the three committees on data access and management, the CDAP members noted the tight linkage between their tasks and the tasks of the CDTDIKPI, especially in relation to the data-related procedures and operations, and drew the attention of the President to the apparent overlap between the tasks of the CDAP and those of the CDTDIKPI and to the possibility of improving the work efficiency of both committees if their tasks were synchronized or redistributed along the lines of data (policy) versus information (KPI).

However, in a meeting scheduled between the CDAP, the CDTDIKPI, and Dr. Roger Hajjar, Assistant to the President, it was decided to keep the task distribution as is, and to try to coordinate the work among the two committees, as much as possible.

Soon after that meeting, the CDAP submitted a task timeline to the ACD covering seven tasks planned to be executed between February and June, including a planned survey/questionnaire to be conducted at NDU for the purpose of identifying the de-facto data-related operations and procedures being practiced at NDU (see APPENDIX A - CDAP TASK TIMELINE).

5. PHASES OF TASK ACCOMPLISHMENT

Based on the task timeline, the work undertaken by the CDAP went through three distinct phases:

In the first phase, based on an initial exploration of data access policies adopted in a number of higher education institutions [2, 3, and 4], the CDAP team members identified a generic set of key data stakeholders adopted across a relatively large cross section of institutions, namely Data Trustees, Data Stewards, Data Processors, and Data Experts. The roles and responsibilities of these data stakeholders were also identified and their administrative positions matched to those existing at NDU, based upon a review of the following resources: the NDU Catalog [6], the NDU Website [7], an in-house organizational chart of NDU [8], and a number of handbooks published by various NDU offices, e.g. the Handbook of the Office of Sponsored Research and Development [9]. As a result, several data stakeholders were suggested for NDU, along with their roles and responsibilities. The outcomes of this first phase of task accomplishment were included in the CDAP First Progress Report [10].

In the second phase, the CDAP worked on the identification of the types of data existing at NDU and the categorization of this data, i.e. the assignment of a security attribute to each type of data. Furthermore, and based on the feedback of the ACD concerning the CDAP First Progress Report, a number of organizational charts were prepared illustrating the de-facto distribution of proposed Data Stewards, Processors, and Experts under each Data Trustee at NDU. In addition, a glossary of terms used in the CDAP First Progress Report was built, for better clarity. However, during this exercise, it was revealed that data access policies in most higher education institutions are more principle-based rather than procedural. In other words, such policies tend to emphasize the general principles and guidelines to be followed, while the detailed data-related operations and procedures (such as data classification into categories - termed categorization), were kept at the discretion of appropriate Data Stewards, particularly because these procedures may vary from an institutional unit to another. The outcomes of this second phase of task accomplishment were included in the CDAP Second Progress Report [11].

Along the same lines, the CDAP participated in the preparation of a data-related questionnaire that was initiated by the CDTDIKPI, for the purpose of identifying the types of data used at NDU, along with the de-facto procedures/operations adopted to transfer data from one institutional unit to another. This questionnaire was distributed to a number of administrative and academic units, with the hope of using its results to adjust, customize, and refine the final recommendations of both the CDTDIKPI and the CDAP.

In the third phase, a more rigorous comparative study of the data access policies of five different higher education institutions [2, 3, 4, 12, and 13] was conducted with the purpose of identifying common features and the most relevant policy statements for NDU. In addition, and based on the comments of the ACD regarding the CDAP Second Progress Report, it was attempted to further simplify the work undertaken so far and clarify it to the maximum degree possible. As such, secondary data stakeholders, i.e. Data Processors and Data Experts, and seemingly complex data-related organizational charts developed in the CDAP Second Progress Report were abandoned, and the Glossary of data-related terms was expanded. This phase culminated in the drafting of a clear, brief, and readily implementable Data Access Policy [14].

Finally, the CDAP prepared its final report, by simply summarizing the work undertaken by the committee, and fine tuning the draft of the proposed Data Access Policy at NDU, based partly on the few received responses to the data-related questionnaire, and partly on the ACD comments regarding the CDAP Third Progress Report.

6. MAIN OBJECTIVES OF PROPOSED DATA ACCESS POLICY

Before starting to draft the proposed Data Access Policy, it was clear to the CDAP members that the ACD members were still perceiving the CDAP work as "more complex than what it is supposed to be". For that reason, it was decided to aim not only for an **effective** (in the sense of having an immediate practical impact on the handling of data) and a **comprehensive** data access policy (in the sense of covering the key data elements and key data stakeholders), but also for a **simple**, **clear**, and **brief** policy as well!

- The **simplicity** of the policy meant that it was preferable to exclude some non-conventional stakeholders, such as Data Processors, Data Experts, and in some instances, Security Contacts,

and Data Access Authorizers, from our proposed policy, at least at this early stage of policy development.

- **Clarity** meant that the structure of the policy needed to be easy-flowing and predictable. In addition, clarity meant that the glossary needed to be expanded to clarify terms as familiar as rules, regulations, processes, and procedures.
- **Brevity** meant that the policy needed to include just the minimum number of statements.

Because the above requirements are often conflicting, the task of meeting them simultaneously proved to be a significant challenge.

7. POLICY DEVELOPMENT APPROACH

To meet the above objectives, it was decided to carefully examine the data access policies of five different higher education institutions, which apply a representative range of Coordinated Models for Data Access. These institutions are:

- The Ohio State University [12]
- The University of Virginia [13]
- Loyola Marymount University [2]
- Virginia Polytechnic Institute and State University [3]
- South Carolina University [4].

A comparative study was performed on the data access policies in effect in these universities, for the purpose of identifying the common elements among them and those that would serve our main objectives of effectiveness, comprehensiveness, clarity, simplicity, and brevity (see APPENDIX B – DATA ACCESS POLICIES OF SELECTED UNIVERSITIES).

8. POLICY LIMITATIONS

Far from being procedural, the proposed Data Access Policy statements for NDU turned out to be mainly principle-based, as with most data access policies in other institutions, with the exception of Statements 9 and 11, which address procedures relating to the access, storage, and protection of restricted and limited access data. The Policy only highlights the overarching guidelines to be followed when accessing data and leaves the task of establishing pertinent procedures and processes to the Data Stewards and Data Custodian.

In addition, the proposed Policy focuses mainly on data access rather than on data management/administration (see Appendix C1 – Glossary, Items 1 and 12). In this context, the Policy does not address issues relating to information resources such as system administration (e.g. backup and disaster recovery), data retention (archiving), and physical security (e.g. electronic devices and cable plants). These and other procedures were left to the discretion of Data Stewards and Data Custodian, with the possibility of appending them to the Policy in future revisions.

9. POLICY HIGHLIGHTS

As a result of the comparative study mentioned in Section 0, a draft Data Access Policy for NDU was prepared (see APPENDIX C – PROPOSED DATA ACCESS POLICY FOR NDU). A quick examination of the Policy draft reveals the following features:

- The Policy is **hierarchical:** with respect to data stakeholders (Data Trustees, Data Stewards, Data Custodian, Data Users, in addition to the Data Access Steering Committee - DASC) and with respect to data itself (Restricted, Limited Access, Public).
- The policy is **deterministic:** in the sense of providing no room for ambiguity concerning the main responsibilities of each data stakeholders:
  - **Data Users:** avoidance and prevention of improper disclosure (data integrity, privacy and confidentiality).

- **Data Custodian:** dissemination of proper data (data views) and guidelines (safe computing standards) and prevention of unauthorized access (data availability and data security).
- **Data Stewards:** categorization of data and assignment of data access privileges.
- **Data Trustees:** supervision of Policy implementation in own operational area.
- **DASC:** development and revision of Policy and conflict resolution.

- The Policy is **well structured**: with the main objectives of simplicity, clarity, and brevity, mentioned in Section 0, being largely met. In fact, the Policy is simply composed of a brief introduction defining data and the purpose of the policy, and twelve statements defining stakeholder groups (1 statement), and data categories (1 statement), and describing stakeholders responsibilities (five statements), special procedures relating to Restricted and Limited Access Data (two statements), in addition to three statements dealing with compliance/violation and enforcement of pertinent laws, rules, and regulations.

10. THOUGHTS, DISCUSSION AND RECOMMENDATIONS

Notre Dame University-Louaizé adheres to the general principle of open access to NDU institutional data not classified as Restricted or Limited Access. Internal units of the University tasked with managing daily operations, conducting University business, and lending strategic support to decision-making requiring sound, quality data produced and safeguarded by one or more units of the University are entitled to quick and speedy access to relevant public institutional data (for policies related to Limited Access or Restricted data see below). External stakeholders may also access NDU institutional data published by all concerned units so long as such access is restricted to informational purposes only, serves research interests of organizations dealing with higher education, and generally for purposes not resulting in the abuse, distortion, or devaluing of the institutional data of the University in order to fulfill its educational mission.

In accordance with the general principles of transparent, equal and fair access to public institutional data, the Institutional Research Unit of the University publishes an Annual Report synthesizing data related to University operations and serves as a compendium of such data. Examples of public institutional data include student enrollment numbers by faculty and major, gender breakdown, number of faculty Ph.D. holders, among others. Access to such data allow internal stakeholders to view and utilize institutional data to make informed decisions about University policies, procedures, and effectiveness, and to support ongoing advancement efforts across the University's academic, administrative, and operational structure. External stakeholders will be able to make judgments about quality-control measures by viewing such public data.

The compilation, safeguarding, and analysis of NDU public institutional data is an ongoing process. Key data types may emerge over time in light of new initiatives and internal/external reporting requirements. As such, individual administrative units may be tasked with revising data collection procedures and developing data management systems to accommodate new data types. In such cases, Data Trustees, together with Data Stewards and all other relevant University data-related units such as Institutional Research and Computing Services, will decide upon the general categorization of such data (Public, Limited Access, or Restricted) in accordance with the general principles and guiding philosophy stated above, namely transparent, equal and fair access to such data.

One of the outcomes of the CDAP work was the proposed specification of twenty six Data Stewards at NDU (see Appendix C2 – Table of Data Trustees and Data Stewards at Notre Dame University), who are expected to work in collaboration with the Data Custodian, under the supervision of four different Data Trustees, and the guidance of a Data Access Steering Committee (DASC). Accordingly, CDAP recommends that these proposed Data Stewards assume their responsibilities and start identifying key data types in their corresponding areas of operation and categorizing them based on the guidelines given in the proposed Data Access Policy. Once this is done, Data Stewards, in collaboration with the Data Custodian, can draft rules, regulations, procedures, and/or processes related to data access, each in his/or her own field of operation. Similarly, the Data Custodian is expected to establish procedures/processes related to systems security, backup, and archiving, and generate and

disseminate periodic data views to concerned Data Stewards. Upon maturity, some common procedures/processes may be gradually integrated by DASC into the Data Access Policy.

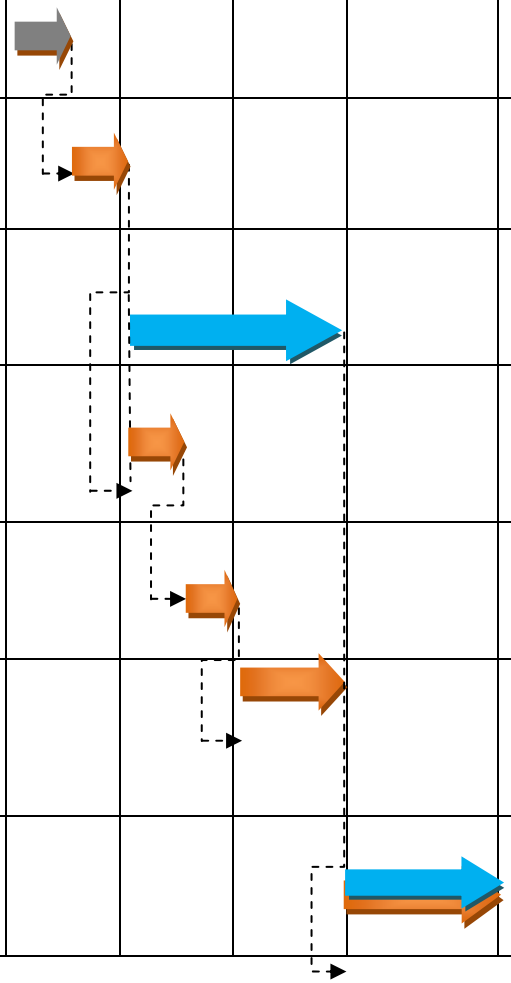
11. CONCLUSION

The main outcome of this report, prepared by the Ad-hoc Committee on Data Access Policies (the CDAP), is the draft Data Access Policy for NDU (see APPENDIX C – PROPOSED DATA ACCESS POLICY FOR NDU). This draft Policy came about after a series of meetings, investigations, discussions, and progress reports. A comparative study examining data access policies in five higher education institutions was instrumental in formulating policy statements that match the NDU environment. The proposed Data Access Policy for NDU is characterized by its simplicity, clarity, and brevity, in addition to its effectiveness and comprehensiveness. Above all, the proposed policy emphasizes the main data related principles of data availability, security, integrity, privacy and confidentiality. These principles aim for a high level of transparency, while preventing unauthorized access to and improper disclosure of institutional data.

As with other data access policies in higher education institutions across the globe, the draft Data Access Policy at NDU turned out to be more principle-based than procedural. Nevertheless, it is clear that this draft Policy is hierarchical, deterministic, and well structured. Furthermore, the draft Policy adopts a collaborative, participatory, and futuristic approach, manifested in particular through the Data Access Steering Committee (DASC), which is given the mandate to develop, amend and update the proposed Policy, as applicable.

APPENDIX A - CDAP TASK TIMELINE

	Task	Start	Finish	Duration	Feb 2011	March 2011	April 2011	May 2011	June 2011
1	Familiarization with assigned tasks, task analysis, and planning	**Feb 4**, 2011	**Feb 18**, 2011	2 Weeks					
2	Specifying ***generic*** key Data Handlers at NDU along with their roles and responsibilities	**Feb 18**, 2011	**March 4**, 2011	2 Weeks					
3	Conducting a University-wide survey on data types, categories and data access/management operations **at NDU**, in collaboration with the Committee on Data Types, Data Identifiers, and KPIs (the CDTDIKPI)	**March 4**, 2011	**April 29**, 2011	8 Weeks					
4	Identification of ***generic*** data types (and sources) for various University units and classification of data types under various data categories (security attributes)	**March 4**, 2011	**March 18**, 2011	2 Weeks					
5	Identification and characterization of ***generic*** key data access/management operations between key units of the University (administrative, academic, and support units)	**March 18**, 2011	**April 1**, 2011	2 Weeks					
6	Drafting of ***generic*** policies for data access/management operations, based on the principles outlined in the Data Access Policy Framework	**April 1**, 2011	**April 29**, 2011	4 Weeks					
7	Refinement of work outcomes in light of survey results and drafting of Committee final report	**April 29**, 2011	**June 3**, 2011	5 Weeks					



APPENDIX B – DATA ACCESS POLICIES OF SELECTED UNIVERSITIES

Following is a summary of a comparative study conducted by the CDAP concerning the data access policies adopted in five higher education institutions namely:

- The Ohio State University [12]
- The University of Virginia [13]
- Loyola Marymount University [2]
- Virginia Polytechnic Institute and State University [3]
- South Carolina University [4].

First, the Ohio State University (OSU) Policy on Institutional Data was found to be composed of five sections, including twelve policy statements defining three categories of data (public, limited access, and restricted) and four data stakeholders (Data Trustees, Data Stewards, Data Custodians, and Data Users). The policy underscores two responsibilities of Data Stewards, namely the data classification process and the data access policies and procedures. In addition, the policy underscores the need for special protection of restricted data, for the reporting of breaches relating to it, and for proper management of requests for restricted data. Written in 2007, in six pages, in addition to three appendices, the policy does not only cover the administration of current data, but also the retention of institutional records and the use of computers and devices. One of its appendices covers the roles and responsibilities of the data stakeholders; a second appendix describes the data classification process and the data access control; while the third one is a glossary of relevant terms.

On the other hand, the University of Virginia Administrative Data Access Policy is composed of six sections defining three categories of data (not sensitive, highly sensitive, and moderately sensitive), specifying the roles and responsibilities of a number of data stakeholders including Chief Information Officers, Data Stewards, Data Security Contacts, Data Users, and System Sponsors (no Data Trustees!), in addition to the Department of Information Technology, and the Communication and Health System Computing Services. Furthermore, and as its name indicates, this policy is restricted to Administrative Data which is "shared data critical for the success of the mission of the University" [13], and addresses the requests for access to the University Administrative Data. This policy was written in 2001, in four pages, in addition to three appendices, one for the definition of data categories; a second one for the roles and responsibilities of data stakeholders; and the final one for the names and titles of Data Stewards and Data Security Contacts.

Thirdly, the University of Loyola Marymount Information Security Policy was written in 2009 in 11 pages including ten sections and three appendices. It defines three data categories (public, sensitive, and restricted), and specifies a number of data stakeholders including Data Stewards, Data Access Authorizers, Data Custodian, and Data Users, in addition to the Chief Information Officer and the Director of Information Security and Compliance. This policy is characterized by a rich Definitions section including important terms such as confidentiality, integrity, and availability. In particular, it describes the management of data access security and the coordination of access including requests for review of data access restrictions and dispute resolution for data access. In addition, this policy covers data retention and physical security, and its three appendices list a number of Safe Computing Standards, the particular responsibilities of the Data Custodian (Information Technology Services), and the positions and names of key Data Stewards, and Data Access Authorizers, respectively.

By far, the most elaborate of all five policies is the Virginia Polytechnic Institute and State University Administrative Data Management and Access Policy. First approved in 1989, and last revised in 2008, this policy is written in 12 (smaller size) pages, and is composed of eight sections, including a Policy section covering data management principles, roles and responsibilities, and a Procedures section covering data administration, access and security administration, and user support and responsibilities. Despite its name, the Procedures section simply provides general overarching guidelines including the definition of data categories (university-internal, public, and limited access). On the other hand, the Policy section

identifies a number of data stakeholders, including Data Trustees, Data Stewards, the Chief Information Officer, Data Managers, Data Experts, Data Users, the General System Management Team, Data Management Group, Information Resource Management, Information Warehousing and Access, and University Information Technology Security Officer. Comparatively complex, this policy does not only cover access and security administration, but also data administration, including data capture, documentation, storage, validation, correction, collection, maintenance, reporting, archiving, and warehousing. This policy includes a list of Data Steward responsibilities, in addition to a rich Definitions section.

Finally, The University of South Carolina Data Access Policy was first written in 1995, and later revised and reduced to six pages in 2010. It is composed of two sections; the Policy section includes a Policy Statement, a Definitions subsection including Data categories (general access, limited access, and restricted), and data stakeholders (Data Trustees, Data Stewards, and Data Users) , in addition to a subsection describing the policy implementation under the authority of the Vice President for Information Technology and Chief Information Officer, with the assistance of the Data Administration Advisory Committee (DAAC). On the other hand, the Procedure section describes the subdivision of data into nine types/operational areas (with one or more Data Trustee for each operational area). In addition, this section describes the responsibilities of Data Trustees, Data Stewards, and Data Users.

APPENDIX C – PROPOSED DATA ACCESS POLICY FOR NDU

Notre Dame University
Data Access Policy
Draft - Version 1.0 – June 2011

In pursuit of the University mission, focused on higher education, research and community service, University community members often have the need to access, collect, modify, or create institutional data. As such, this data is considered an important University asset that needs to be protected from unauthorized access and improper disclosure. The main aim of this policy is to ensure the availability of institutional data to appropriate users, while highlighting the shared responsibility of these users in maintaining institutional data security, privacy, confidentiality, and integrity, as applicable.
Towards that aim, *institutional data* is defined as information stored in print or electronic format that is used in support of the functions of the Institution (University), by members of the University community, including administrators, faculty members, staff, students, alumni, guests, and visitors.

Policy Statements

Compliance with Laws, Rules, and Regulations

The University community members accessing institutional data are required to comply with the pertinent rules and regulations set by the University and all applicable University policies aiming to establish information security and protect sensitive and critical information. In addition, University community members are required to comply with all applicable national laws including the Stipulations and Contracts Act (قانون الموجبات والعقود), the Data Confidentiality Act (قانون سرّية المعلومات), and the Health Ethics Act

(قانون الآداب الصحّية).

Classification of Data Stakeholders

The community members accessing data at NDU are classified into four groups:

A. Data Trustees: are the Vice-Presidents of the University, entrusted by the University, the sole owner of institutional data, to oversee the implementation of this policy in their respective operational areas.

B. Data Stewards: are University officials, typically at the level of Registrar, Deans or Directors of various University Units, who have the responsibility of implementing this Data Access Policy under their stewardship and under the supervision of the appropriate Data Trustee.

C. Data Users: are University community members who access institutional data as part of their job-related functions within the University**.**

D. Data Custodian: is the Department of Computing Services (DCS) which maintains the computer hardware systems and software applications which store institutional data. When authorized by the appropriate Data Steward, the Data Custodian processes and provides access to the relevant institutional data.

Categorization of Data

Depending on its level of sensitivity and criticality, and on its legal protection status, institutional data is classified into three categories:

A. Restricted Data – Data protected by law or considered critical to University operations. Protected health information, non-public personal information, and personally identifiable information are examples of restricted data.

B. Limited Access Data – this is the default data category, deemed by the corresponding Data Steward to be inappropriate for public use. It is made available only to a specific group of University community members, based on their job description. University general finances, and buildings blue prints are examples of limited access data.

C. Public Data – all data that is widely available for public use with no restrictions. The volume of this category of data is to be maximized through the reduction of unnecessary limitations, in line with the principles of transparency and data availability. Examples of this category of data are the NDU Catalog and the publications of the NDU Press.

Responsibilities of Data Trustees

Data Trustees are the University officials to whom the institutional data is entrusted. In this capacity, each Data Trustee is directly responsible for the types of data existing in his or her operational area. However, Data Trustees delegate parts of this responsibility as follows:

A. The planning and policy development part of this responsibility is collectively delegated by all Data Trustees to the Data Access Steering Committee - DASC (see Statement 8.)

B. The policy implementation including the development of policy-related processes and procedures is delegated by each Data Trustee to his/her own Data Stewards (see Statement 5.)

Consequently, Data Trustees have the responsibility of coordinating issues relating to data access policy development with DASC and their Data Stewards. In addition, Data Trustees have coordination, supervisory, and approval responsibilities towards their corresponding Data Stewards, in relation to policy implementation and development of related processes and procedures.

Responsibilities of Data Stewards

Data Stewards are the University officials delegated by Data Trustees to implement the data access policy in their own operational areas through the establishment and execution of procedures or processes targeting various functions including:

A. Data categorization: given a default category of limited access, the Data Steward categorizes each type of data in his/her own operational area, based on privacy and confidentiality requirements, legal requirements, or criticality considerations.

B. Assignment of data access privileges to Data Users operating under their stewardship. Data Users with access privileges to limited access or restricted data are to be formally notified of their privileges and the corresponding responsibilities.

C. Taking decisions regarding the approval/denial of requests for access to limited access or restricted data, in coordination with the corresponding Data Trustee.

D. Establishment and implementation of procedures and processes, in coordination with the Data Custodian including protection and control procedures, the generation of periodic data views, and the execution and authentication of data access privileges.

Responsibilities of Data Users

When accessing institutional data, all Data Users are required to use the data only for the purpose of accomplishing their functions as specified in their job descriptions, or as members of the University community and to protect their access privileges through various means including:

A. Not disclosing or distributing institutional data except as required by their job descriptions, and after seeking the approval of the appropriate Data Steward.

B. Not using any institutional data for personal gain, profit or interest, or for the personal gain, profit, or interest of others.

C. Complying with all applicable laws, rules, and regulations relating to authorized and proper access, use, or disclosure of information (intentional and non-intentional), and observing ethical standards relating to the privacy and confidentiality of individuals whose records they access.

D. Ensuring the integrity and high quality of institutional data they use, by making certain this data has a high standard of accuracy, consistency, completeness (non-selectivity), and timeliness.

Responsibilities of the Data Custodian

The Data Custodian is the central unit in charge of storing, protecting, and maintaining, institutional data in all electronic formats. Its role is particularly critical in the establishment, monitoring, and support of data security. The Data Custodian establishes and implements various procedures and processes targeting a number of functions including:

A. Storage, maintenance, and support of institutional data in electronic formats originating from various administrative, support, and academic units.

B. Establishment and deployment of a high security system for the purpose of preventing unauthorized access to restricted and limited access data in particular. Such system may include security-related rules, regulations, processes, and procedures such as protection and control procedures, encryption of restricted data, and safe computing standards (for illustration purposes see Appendix C3 – Sample Safe Computing Standards).

C. Activation, authentication, monitoring and termination of data access privileges, in coordination with the concerned Data Stewards.

D. Computerization, authentication, and monitoring of data intensive processes (i.e. registration).

E. Periodic generation of data views, in coordination with the concerned Data Stewards.

F. Execution of requests for data access, as requested/approved by Data Stewards and Data Trustees.

Responsibilities of the Data Access Steering Committee (DASC)

The Data Access Steering Committee (DASC) is a standing committee appointed by the University President for the purpose of planning, and policy development, in addition to data-related conflict resolution. DASC members are typically selected from selected Data Trustees and Data Stewards, a representative of the Data Custodian, and other concerned professionals. This authority is given the privilege of periodically updating, amending, and developing the Data Access Policy, in coordination with all Data Trustees and Data Stewards.

Special Protection of Restricted and Limited Access Data

Whereas the principle of data availability and data integrity are typically applied to all institutional data, including public data, the principles of data security, privacy and confidentiality, should be particularly applied with restricted and limited access data. Towards that end, all data users are expected to handle restricted and limited access data with utmost care and attention, apply safe computing standards, and follow appropriate guidelines and procedures as established by the Data Stewards and the Data Custodian, including protection and control procedures. These procedures include the following:

A. Protection of restricted and limited access data, through encryption or alternative methods, as applicable, if this data is stored or used on portable devices, are transmitted electronically, or physically moved from their secure University locations.

B. Prevention of storage of restricted data on personally owned computers or storage devices.

C. Prevention of storage or use of restricted or limited access data by external stakeholders without contractual agreements providing the same level of protection and control adopted at the University.

Handling Requests for Access to Restricted or Limited Access Data

All requests for access to restricted or limited access data, whether by University internal stakeholders (administrators, faculty members, staff, or students) or external stakeholders (alumni, guests, visitors, or other parties) must be handled with extreme care. Such requests must be addressed in writing to the appropriate Data Steward, who should assess it based on the existence of a need-to-know basis and on the criticality of the requested data. The decision of the Data Steward should be authenticated by the corresponding Data Trustee.

In case of denial of the request, the reasons for the denial should be explained in writing to the requestor. In this case, the data access requestor may appeal the decision of the Data Steward to the Data Access Steering Committee (DASC).

Reporting of Breaches and Violations

Actual or suspected breaches of this Data Access Policy, unauthorized access or improper disclosure of restricted or limited access data, in particular, violations of pertinent University rules and regulations, and of relevant national legal obligations, must be reported to the appropriate Data Steward and to the Data Custodian where applicable.

Enforcement

Breaches of this Data Access Policy and associated rules, regulations, processes and procedures will be handled according to the existing University disciplinary procedures. Related violations of local laws or regulations will be reported to the local authorities as required by law.

Appendix C1 – Glossary

1. **Data Access**
   Refers to the ability of viewing, examining, inspecting, and/or reading data without being able to create, modify, or write it. Whereas data access may be given to general Data Users, data creation and/or modification is restricted to Data Trustees, Data Stewards, or their designees.

2. **Data Accuracy**
   An attribute of the exactness and precision of the data conveyed. It is generally measured using a Level of Tolerance or a Margin of Error.

3. **Data Availability**
   A principle requiring the disclosure of data to the maximum extent possible to promote information exchange, knowledge dissemination, and transparency.

4. **Data Category**
   A security classification/categorization typically assigned to data elements (items, extracts and views). Typical data categories are: Public, Limited Access, and Restricted.

5. **Data Completeness**
   An attribute of how thorough the data reported is, in terms of projecting the complete picture, the right context, and the circumstances under which the data was collected. Using selective data has the potential of jeopardizing this attribute.

6. **Data Confidentiality**
   A principle requiring the non-disclosure of certain types of data based on their criticality or sensitivity. This principle is often closely associated with Data Privacy.

7. **Data Consistency**
   An attribute of the degree of fidelity with which the same data is reported in two or more different Data Elements.

8. **Data Element**
   A single term given to data items, data views, and data extracts.

9. **Data Extract**
   Also called *data snapshot*, this is a subset of data extracted from the University database at a fixed point in time, and often moved to a secondary physical storage location.

10. **Data Integrity**
    A principle requiring a high standard of Data Accuracy, Data Consistency, Data Completeness, and Data Timeliness. This principle, along with Data Availability, plays an important role even for Public Data, and directly contributes to raising the Data Quality and avoiding misinterpretation of data.

11. **Data Item**
    Refers to a basic unit of data elements, collected or recorded during a particular time period. Examples of data items include: petition(s) submitted by Student X, 2011 registration forms.

12. **Data Management/Administration**
    Refers to the ability to manage the information resources, and involves data collection/capture, validation, maintenance, correction, documentation, storage, archiving, and warehousing.

13. **Data Privacy**
    A principle requiring the non-disclosure of certain types of data based on their personal nature. This principle is often closely associated with Data Confidentiality.

14. **Data Quality**
    The degree of dependability, reliability, and validity of data. Data Quality is the result of observing the principle of Data Integrity (accuracy, consistency, completeness, and timeliness).

15. **Data Security**
    The principle requiring the protection of data against unauthorized access, improper disclosure, tempering, falsification, and disruption. The procedures associated with this principle are typically called Protection and Control Procedures.

16. **Data Timeliness**
    An attribute of the time simultaneity of two or more data elements, when correlated with each other's. To be used together, two data figures need to be generated/collected during the same time period.

17. **Data Type/Field/Operational Area**
    Refers to the nature of data and the field in which it is used. Typical institutional data types include Academic Data (e.g. student data, faculty data, and course data), Administrative Data (e.g. human resources, facilities, and services), Financial Data, and Research and Development Data.

18. **Data View**
    This is a set of stored data items typically assembled from the most current data available at the time of access.

19. **Institutional (or University) Database**
    This is a database where Institutional Data is stored under the custody and supervision of the Data Custodian. The flow of data from and into the database is typically managed in coordination between Data Stewards and the Data Custodian.

20. **Institutional Unit**
    An academic, administrative, or service division or office of the University (e.g. Registrar's Office, and Academic Faculties)

21. **Improper Disclosure**
    Releasing data by breaching Data Security, Data Privacy and Confidentiality, or Data Integrity.

22. **Policy**
    Set of general guidelines aiming to apply a number of principles.

23. **Procedure**
    A number of steps designed to perform a certain function (e.g. registration procedure).

24. **Process**
    A set of procedures designed to perform a more complex function (e.g. archiving process).

25. **Regulation**
    A set of rules put in place to comply with a certain principle (e.g. security regulations).

26. **Rule**
    A single instruction put in place to comply with a certain principle (e.g. safety rule).

27. **Unauthorized Access**
    Accessing Restricted or Limited Access data without securing the proper data access privileges.

Appendix C2 – Table of Data Trustees and Data Stewards at Notre Dame University

	Data Type/Operational Area	Data Trustee	Data Stewards
1	Academic Affairs Data	VPAA	1. Director, Office of Admissions 2. Registrar, Office of the Registrar 3. Director, Student Affairs Office 4. Director, The University Libraries 5. Director, Alumni Affairs Office 6. Director, Office of Tests, Measurement and Evaluations 7. Director, Division of Continuing Education 8. Director, North Lebanon Campus 9. Director, Shouf Campus 10. Dean, Faculty of Architecture, Art and Design 11. Dean, Faculty of Business Administration and Economics 12. Dean, Faculty of Engineering 13. Dean, Faculty of Humanities 14. Dean, Faculty of Natural and Applied Sciences 15. Dean, Faculty of Nursing and Health Sciences 16. Dean, Faculty of Political Science, Public Administration and Diplomacy
2	Sponsored Research data	VPSRD	1. Director, Center for Applied Research in Education (CARE) 2. Director, Center for Digitization and Preservation (CDP) 3. Coordinator, Lebanese Center for Societal Research (LCSR) 4. Director, Lebanese Emigration Research Center (LERC) 5. Director, Water Energy and Environment Research Center (WEERC) 6. Director, NDU Press 7. Director, University International Affairs Office 8. Coordinator, Washington DC Office
3	Cultural, Public Relations, and Internship Data	VPCAPR	N/A

4	Administrative, Financial, and Human Resources Data	VPAFHR	1. Director, Business Office 2. Manager, Human Resources Office

Appendix C3 – Sample Safe Computing Standards

Following is a selected list of Safe Computing Standards as adopted at the Loyola Marymount University [2]:

A- Computer

- *Maintain computer operating system with latest security patches*
- *Maintain computer applications by installing updates when prompted*
- *Maintain anti-virus software with latest virus definitions*

B- Passwords

- *Use secure passwords to access any computer used to access the campus network*
- *Keep computer monitor and desktop area clear of any hand written passwords*
- *Do not share passwords with anyone*

C- Data Protection

- *Secure computer from unauthorized access when unattended*
- *Shred all discarded hard copies of confidential information*
- *Securely destroy all unneeded instances of files, whether digital or paper that contain non-public personal information (driver's license number, transcripts, grades, etc)*
- *Do not copy non-public personal information (NPI) or personal health information (PHI) to mobile media without written permission from the respective Data Steward*

D- Email

- *Never respond to email requests asking for your passwords or other account information*
- *Only open attachments when you are sure it is safe to do so*
- *Only click on embedded links to websites when you are sure it is safe to do so.*

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