

# *The NDU Gazette*

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*A monthly publication covering decisions taken at the COD meetings*

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*Issue Number One, August 2015*

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## Program Review Guidelines and Procedures

Approved by COD on June 11, 2014

Updated November 15, 2014

Quality and continuous improvement are critical success factors for modern higher education institutions. From this perspective, NDU is actively engaged in accreditation processes at institutional and/or academic unit levels. These processes, as well as those related to quality education provision dictate continuous reviews of academic programs. Thus, the main objective of the present guidelines is to help academic units review and assess their undergraduate and graduate programs for which accreditation standards do not exist. Programs undergoing external reviews by recognized accreditation bodies can use their external review results to demonstrate compliance with the present guidelines. Multidisciplinary programs involving more than one academic unit are under the responsibility of the unit handling admission and graduation processes.

All degree and non-degree programs offered by NDU shall be reviewed according to the stipulations and timetable appended to the present guidelines at least once every six years. The review shall be planned over a period of one academic year during which the process is initiated by the VPAA's Office. After consultation with the Council of Deans (COD), the VPAA's Office identifies, at the beginning of each academic year, the programs for which a review is to be performed and requests from the Dean's Office of the concerned Faculty a detailed self-study report for each program. Those requests are sent during the first week of the fall semester and the self-study reports must be submitted by the last day of the same fall semester. Upon the recommendation of the concerned Faculty Dean, the VPAA's Office shall appoint a Program Evaluation Committee (PEC) for each program under review. Members of the PEC are selected from the concerned Faculty and Department and will include one external reviewer. The role of the PEC is to review the self-study report and to verify its content, and to what extent it conforms to the prescribed guidelines as inspired by standards two (2) and four (4) of NEASC. The committee shall submit its findings, along with its recommendations, if any, by the end of the following spring semester to the VPAA's Office. The report of the PEC is forwarded to the concerned Faculty and Department for consideration and feedback within one month of its receipt. Inputs from the concerned Faculty and Department along with the PEC's report are forwarded to the COD who shall meet and formulate recommendations to be submitted to the President by the end of the summer semester. The President will then take, accordingly, the appropriate actions depending on the extent to which the prescribed guidelines were met.

Drafted & Approved: May 28, 2014 by COD Sub-Committee (G. Asmar, M. Hayek, E. Menassa)

Approved: June 11, 2014 by the Council of Deans

Updated: November 15, 2014 by COD Sub-Committee (G. Asmar, M. Hayek, E. Menassa)

Update Approved: November 19, 2014 by Council of Deans

Revised: \_\_\_\_\_ by \_\_\_\_\_

## Program Review Guidelines – Timetable

The following table summarizes the different steps of the program review process.

<b>Date</b>	<b>Task</b>	<b>Responsible</b>	<b>Remarks</b>
First week of fall	Send review requests	VPAA's Office	Include deadlines and procedures
Last day of fall	Submit self-study reports	Deans & Outcome Assessment Committees of the programs under review	Faculty/Programs to manage internally the process of preparing the reports
First week of spring	Form Program Evaluation Committee (PEC)	VPAA's Office	Include deadlines and procedures
Last day of spring	Submit findings (evaluation report)	Program Review Committees	Include recommendations in the final evaluation report
First week of summer	Send the evaluation reports to the concerned Faculties for comments	VPAA's Office	Include deadlines and procedures
End of July	Submit programs' responses	Deans/Program Outcome Assessment Committees	Detailed feedback
First week of August	Forward inputs of Faculties and PEC reports to the Council of Deans	VPAA's Office	Include deadlines and procedures
Last day of summer semester	Assess the entire process & submit recommendations to the President	Council of Deans	Recommendations: Extent to which the programs meet standards
Before the end of the academic year	Issue the final outcomes	President	

### Typical Structure of a Self-Study Report

- Introduction
- Basic Statements
- Curriculum Review
- Faculty
- Governance
- Resources
- Conclusions
- Appendices

Attachment: Appendix - Basic Components of a Self-Study Report.

## **Program Review Guidelines**

### **Appendix: Basic Components of a Self-Study Report**

**Introduction:** This appendix aims at providing a detailed description to help writing an objective self-study report and prepare a systematic program review process. The program review process is an opportunity for a program to conduct an objective assessment of its academic offerings. Preparing an objective self-study requires usually collecting various data for the program and use such data to identify weaknesses and opportunities and develop a roadmap to guide future evolution and progress. The Office of Institutional Research and Assessment (OIRA) can provide units with all kinds of data as needed for their self-study reports. Some of the recommendations presented in this appendix require prerequisites that are necessary for conducting an effective self-study. The appropriate offices will be working to pave the way and make those prerequisites available in due time. Furthermore, some ideas might seem irrelevant or difficult to accomplish, nevertheless, these irrelevancies and difficulties should vanish as the corresponding units are gaining more and more experience and with further development and growth of NDU.

#### **I. Basic Statements**

##### **I.A. Program's Mission, Educational Objectives and Student Outcomes**

The first chapter of a self-study report should clearly state the program mission, the program educational objectives (PEOs) and the student outcomes (SOs), and describe their relationship to the mission of the Faculty and University.

Currently, all NDU units have mission statements, and analyses were carried out to check their connection to the mission of the University. Some programs have program educational objectives while others are working or have yet to work on preparing their PEOs. Mission and PEOs are the pillars upon which a program review is based.

**Mission Statement:** A mission statement is a set of clear, concise and measurable sentences establishing the mission of the unit under consideration (Faculty, Department, and programs). All units should draw their mission statements from the University's Mission statement and Vision.

**Program Educational Objectives (PEOs):** Those are clear, concise and measurable sentences describing the educational objectives of the program. A PEO represents a set of skills attained by the graduates three to five years after graduation. The mission of the program as well as all upper level missions should be considered in order to prepare the PEOs.

**Student Outcomes (SOs):** Those are clear, concise and measurable sentences that are expected to be delivered by the program's curriculum. An SO represents usually the skills acquired by the students at the time of graduation and should be derived from the program objectives. They should also be used to develop curricula and course learning outcomes.

**Course Learning Outcomes (CLOs):** Those are clear, concise and measurable sentences that are expected to be delivered by every course at its completion. A CLO represents usually the skills acquired by the students at the completion of one course and should be developed keeping in mind the course content and SOs. They are the basic blocks upon which the entire assessment and evaluation process is based. They are to be used to demonstrate the achievements of the program educational objectives and, consequently, the program mission, through the student outcomes.

## I.B. Curriculum Mapping

A curriculum mapping is a coherent approach according to which all the components of the process are linked together. The mission and PEOs are linked by definition since the PEOs are written to reflect directly the mission. SOs and PEOs are also linked since the latter are used to derive the former. To help show clearly such a link, programs are advised to map both elements through a mapping matrix as shown in table 1.

**Table 1. Matrix mapping SLOs to PEOs**

	PEO I	PEO II	PEO III
SO 1		X	
SO 2	X		X
SO 3			
SO 4		X	
SO 5	X		

Various indicators can be used to show the weight of the link by using different marks in the table if needed. In such a way, preferential paths can be established to help quickly detect the route to be followed in order to tackle changes resulting from the review process.

Likewise, the SLOs can be linked to the different courses offered by the program under consideration. We have to remember here that courses have also course learning outcomes and by mapping the courses to SLOs, we are indirectly linking the CLOs to SLOs. Table 2 below is a typical sample table to show the relationships, and here too, some weights can be assigned to the links, if needed, in order to show strong and weak relationships.

**Table 2. Matrix mapping courses and SLOs**

	SLO I	SLO II	SLO III	SLO IV	SLO V
DEP 101	X		X		
DEP 201				X	
DEP 301		X			
DEP 401	X				X
DEP 501			X		X

It is to be noted that the analysis should be done by program and not by a Department of a Faculty. The ultimate objective of a program review is to evaluate the offering of a given program made of a set of courses leading to a degree.

After completing the program matrices, it is highly recommended to substantiate the relationships between the various components by providing a rationale based on the element under consideration and, ultimately, on course content and structure.

## II. Curriculum Review

A curriculum review is the process used to demonstrate that the content of courses leads clearly to the achievement of the SLOs, the PEOs, and ultimately the mission of the program and, consequently, the mission of the university. In this regard, student learning assessment must be done through a set of tools/steps that evaluate the outcomes at both course and program levels.

A typical process is summarized in Figure 1 below. The process involves two loops and requires the identification of the different constituencies of a program. Typical constituencies are the students, faculty members, alumni, employers, and external advisory committees, and their inputs are needed at all levels of the assessment process. The core role is played by the faculty body as faculty members are the backbone of the evaluation process and are directly responsible for implementing the changes needed to fulfill the objectives.

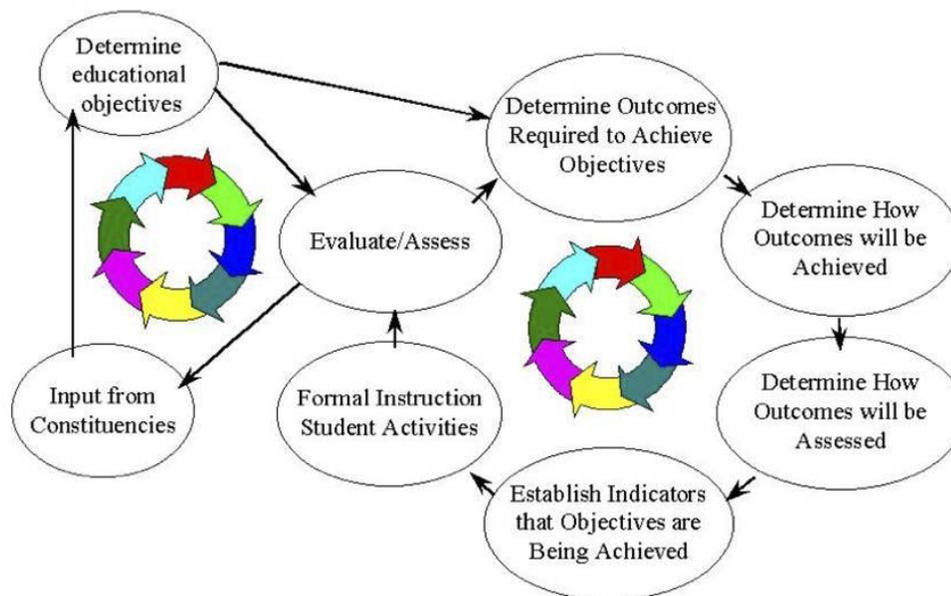


Figure 1. Block Diagram of Information Flow in Program Improvement Process

Various tools can be used to assess/evaluate the learning outcomes and educational objectives of a program. On one hand, direct tools like rubrics, locally developed exams and similar concepts are great in assessing the course learning outcomes. The results are compiled by faculty members to demonstrate that some pre-set indicators related to CLOs are met and to suggest changes if not. Sometimes, changes are to be suggested even if the indicators are met since the process is by definition a continuous improvement process and there is always room for improvement.

Indirect tools can be used to support the direct tools and consolidate the results. They are ideal means to gather the opinions of the other constituencies and involve mainly surveys administered at regular intervals as dictated by the loops mentioned above. For example, the alumni can be surveyed on regular basis to check the consistency of the PEOs with the current requirement of the job market (alumni surveys); the graduating students can be surveyed to check the consistency of the SOs with what they have acquired during their residency at NDU (exit surveys); the students can be surveyed to check their engagement and the National Survey of Student Engagement (NSSE) is a typical tool in this regard (check <http://nsse.iub.edu/> for more details). On these surveys, participants rate their knowledge and university preparation against outcomes. The alumni results are meant to realign the student outcomes with job market requirements while the exit surveys are meant to realign the curriculum with the student outcomes.

Eventually, faculties/programs should establish external advisory committees/boards to help the programs realign their PEOs with the job market and other socio-economic requirements. As most of the faculties at NDU do not have advisory committees/boards yet, a temporary alternative is to use the alumni surveys to assess the program objectives through the assessment of the student outcomes (i.e., if the alumni questionnaire results show a weakness or an irrelevancy of a certain SO relative to the

employment needs and experience, this would constitute a weakness in program objectives too). Furthermore, the National Student Survey of Student Engagement (NSSE) results can be used to benchmark the results of the unit under consideration against selected peer programs with an established reputation worldwide.

Some typical issues to be considered during the assessment/evaluation process are listed hereafter to guide the program in their self-study preparation endeavor:

1. Ensure that multiple sections of the same course are consistent with regard to course content.
2. Explain the means by which faculty, staff and students are made aware of the program's objectives and the student learning outcomes. In addition, indicate the frequency of assessment of the program objectives and the student learning outcomes, along with the assessment tools, such as questionnaires or surveys or other means, making sure to specify how students are involved in the assessment process (e.g., in-class evaluation) and how the faculty is made aware of the results. Were there any changes made in response to such assessments?
3. Explain how the program responds to the market needs. For example, this could be done by administering graduate employment surveys, by identifying a demand for graduates with specific qualifications, and by receiving feedback from the placement office.
4. How are advancements in the field, innovations, new technologies and new ideas accounted for in the course curriculum?
5. Indicate whether the program provides support (service courses, assessment results, and so on) to other majors/programs.
6. Explain how, if applicable, service courses offered by other departments meet the requirements of your students.

The teaching/learning processes are to be discussed in detail emphasizing the strengths and weaknesses of the corresponding program. Typical points to be discussed should include but are not limited to:

1. Programs can use different modes of instruction, i.e., debates, lectures, discussion sessions, tutorials, and so on. Comment on the use of these modes and discuss their effectiveness.
2. Similarly, explain how IT is used in the delivery of the curriculum and comment on the resources required to achieve the required level of IT usage.
3. The different pedagogical approaches used in teaching and learning i.e. workshops, guest lectures, etc. should be described and evaluated.
4. Assess the relationship between instructional quality and program size. In doing so, consider the number and needs of students enrolled in a particular program, as well as the available resources and faculty expertise (sufficiency and qualification) dedicated to support the identified needs.

Programs undertaking reviews should also address the issue of advising and faculty/student interaction. Items to be considered may include but are not limited to:

1. Describe briefly how advising is provided to your students and how it is evaluated and improved.
2. How do students and faculty interact outside of the classroom setting?
3. Indicate the number of students involved in individual or collaborative research.

The NSSE results may greatly help in this regard as some questions are directly related to faculty/student interactions and the level of engagement in active and collaborative learning and academic challenges.

Data are the backbone of any self-study preparation and the Office of Institutional Research and Assessment is the right arm to support the programs in their endeavor. All evaluations should be

correctly documented and supported by the valid data gathered from official sources. Typical items to consider are:

1. How many degrees were awarded for the past five years and how did enrolment vary during the same period?
2. Statistics of enrolment and students performance such as:
  - a. The students GPA and related distribution by class level
  - b. The average SAT/Admission scores of the students
  - c. The number and percent of students on honor lists
  - d. The number and percent of dismissed students and those on probation
  - e. The distribution of students by gender
  - f. The percent of transfer students from other universities/other Faculties at NDU.
3. How long does it take for sophomore and transfer students to finish their degree? What factors impact the time taken to graduation in terms of frequency of offered courses or any other factor?
4. What services or activities were provided to students by the program for the past five years (e.g., internships, career planning, clubs, academic or professional organizations)?

### III – Faculty

Construct a matrix outlining the courses taught by full-timers, cross tabulated with faculty members names as per the following example:

**Table 3. Cross tabulation: full-time faculty members and courses**

Course	Faculty A	Faculty B	Faculty C	Faculty D	Faculty E
DEP 101					
DEP 201					
DEP 301					
DEP 401					
DEP 501					

1. Discuss how faculty qualification and academic preparation reinforce the mission, goals and objectives of the program. In doing so, comment on the skills and experiences of the faculty as well as their ability to teach the range of core, elective and service courses.
2. Compute full-time to part-time ratios and provide full-time equivalent statistics.
3. Compute full-time equivalent to student ratio.
4. Explain the criteria used to recruit and appraise the performance of part-time faculty members, as well as the extent of their contribution in teaching the different courses assigned to them (core, elective and service courses).

### IV – Program Administration and Governance

1. Outline the administrative and governance structure of the program as well as the responsibilities and tasks of the different committees and any special role attributed to individual faculty.
2. Explain how junior faculty are empowered and encouraged to contribute to governance.

### V – Resources

1. Explain how existing resources are aligned with the program. In doing so, consider the following elements:
  - Operating expenses
  - Salaries of faculty and staff

- Staff support
  - Teaching/research assistantships
  - IT and technical support, including instructional equipment
  - Physical and infrastructure facilities
  - Other external and internal sources for development and research
2. Identify how additional resources, if available, can be used to support the program.
  3. List and comment on external funds (i.e., grants, gifts, consulting, other contracts, etc.) received by the program to support its diverse activities (teaching, research, conferences, creative work, etc.) and indicate any particular effort put to obtain external funding for specific activities. Make sure you show the association between these activities and the main goals and objectives of the program.
  4. Discuss the means by which Faculty/Program Advisory Committees/Boards, if they exist, contribute to the quality and continuous improvement of the program and to student learning and experience.

## **VI – Conclusions and Future Plans**

1. Provide a summary of the strengths and weaknesses identified in the review.
2. Discuss how you are going to mitigate the effects of the identified weaknesses, capitalize on the identified strengths and address the current and potential future challenges. Discuss plans for continuous improvement.

# Graduate Student Assistantship Rules and Regulations

Approved by COD on Jan. 28, 2015

## Introduction

A graduate student is a valuable asset who may be offered an assistantship in the form of tuition waiver and/or stipend. A University Graduate Student Assistantship (UGSA) is offered to a student who is assigned as Graduate Teaching Assistant (GTA) or as Graduate Research Assistant (GRA) by the respective department. A GTA will mainly teach remedial and/or introductory courses whereas a GRA will mainly be engaged in research projects under the supervision of a full-time faculty member. The objective of a UGSA is to increase the efficiency of teaching, enhance research activities and promote NDU's graduate programs. In addition, it provides graduate students teaching and research opportunities that help them develop their critical thinking, scholarly competence, cultural maturity, and professional and administrative experiences in accordance with the mission, vision, core values and strategic goals of Notre Dame University–Louaize (NDU).

## Eligibility

To be eligible, all applicants should have a full-time load.

(a) NDU Students must have:

- (i) A minimum of 3.3 GPA in the undergraduate major
- (ii) Three recommendation letters
- (iii) An interview by the concerned Faculty Graduate Committee

(b) In addition to the above, applicants from other universities to NDU should complete a minimum of 6 graduate credits at NDU with a GPA of 3.5 and above. This requirement may be waived upon the discretion of the Faculty Graduate Committee

(c) Other grading systems will be assessed by the concerned Faculty Graduate Committee to determine the GPA in the major field of study

(d) During the summer session, graduate students may be eligible for a GTA/GRA depending on the approved needs of the respective department

## Duration

A GTA/GRA is granted assistantship for the duration of one semester/summer session.

## Conditional Renewal

A GTA/GRA is renewed if,

- (a) The respective department decides on the continuous need for an assistantship
- (b) The student maintains a GPA of 3.5 and above

## Duties of a GTA/GRA

A GTA/GRA will be assigned duties by the Faculty Graduate Committee upon the request of the chairperson of the respective department.

- (a) The duties of a GTA/GRA shall be defined by the concerned department and shall be 20 hours per week
- (b) A Teaching/Research Assistant will not be assigned to perform non-academic duties.

## Selection Process and Appointment Procedure:

Upon announcement of a GTA/GRA by the concerned Faculty:

- (a) A graduate student shall submit an application

- (b) The concerned Faculty Graduate Committee will oversee the selection process. It shall:
  - (i) Review applications (transcripts, recommendation letters, etc.)
  - (ii) Conduct interviews
  - (iii) Assess the research potential of the candidate
  - (iv) Evaluate a one-hour teaching presentation by the candidate
- (c) Upon approval, the concerned dean shall offer the student, on behalf of the University, an official letter/contract for final signature.
- (d) The appointment procedure is completed when the candidate signs the letter/contract and when it is ratified by the signature of the President on behalf of the University.

### **Compensation**

The GTA/GRA shall receive:

- (a) Full tuition waiver. For a GRA, the tuition shall be paid for, primarily, by grants/funds received by the GRA advisor/thesis supervisor. Any outstanding tuition balance shall be settled by NDU through the GRA carrying additional academic duties.
- (b) A stipend of up to LL300, 000/month
- (c) Student parking during the duration of the contract

### **Enactment**

The present policy shall take effect immediately after its approval by the President.

# Financial Policy

Endorsed by the COD on March 27, 2015

## Policy Purpose and Objectives

The primary responsibilities of the financial and business function of the Notre-Dame University are to:

- Maintain accounts and prepare reports which show the financial effectiveness of University activities and programs.
- Advise and help administrators accomplish the mission of the University through the best use of financial resources.
- Provide for the stewardship of funds.

## Policy Statement

All business and accounting of the University is to conform to generally accepted accounting principles and practices. The financial procedures given in this policy are intended to outline only the more relevant conventions which apply to University business and financial operations. They are not meant to include all the concepts, assumptions, conventions, principles, or rules upon which generally accepted practices are based.

## Financial Statements

Financial reporting is in line with US GAAP, which comprises the following:

1. Statement of Financial Position
2. Statement of Activities

Additional reports are prepared to provide relevant management information.

The University reports on its financial condition and fiscal results of current operations in three basic ways:

1. *Statement of Net Position*
2. *Statement of Changes in Revenues, Expenses, and Changes in Net Position*
3. *Statement of Cash Flows*

## Budget

The Budget Office, under the supervision of the office of the Vice President for Finance, shall provide efficient and productive methods for budget preparation, using sound budgeting and management practices, and financial planning that supports management decision-making, as well as developing innovative solutions to challenging problems. Major responsibilities shall include:

1. Providing guidance in the preparation of the University unit budgets.
2. Compiling and developing the University's preliminary Annual Budget.
3. Completing internal and external budgeting reporting requirements.
4. Processing budget transfers and funding requests as appropriate to accomplish the Mission of NDU.
5. Reviewing capital project requests and monitoring capital budget expenditures.
6. Providing financial analysis for individual units and/or the University as a whole.
7. Assisting in linking University budgets with the Mission and Strategic Plan of the University.
8. Monitoring periodically the implementation of the Annual Budget and making the proper adjustments, when necessary.

Appendix A defines the procedures and scope of the Annual Budget.<sup>1</sup>

### **Internal Audit**

The Internal Audit function provides an independent appraisal of the University's operational activities to ensure:

1. The efficient and effective utilization of resources;
2. The obligation and expenditure of funds;
3. The safeguarding of funds, property, other assets and resources against waste, loss, unauthorized use, and misappropriation;
4. The proper recording, accounting, and reporting of revenues, expenditures, and transfers of assets, resources, or funds, to maintain accountability of resources; and
5. The appropriate management and proper use of funds.

### **External Audit**

The President, along with the Board of Trustees, is responsible for the appointment of the External Auditors. Once a year, the Board of Trustees will review the External Auditor's Report of the preceding year and approve corrective measures recommended by the President.

### **Signature Authority**

Authorized administrative officers may delegate authority to sign official financial documents to other responsible employees under conditions approved by the President. Such delegation does not relieve the administrative officers of the responsibility for any action taken.

Administrative officers and those employees authorized to sign for them must hand sign all documents. The use of rubber stamps, signature plates, or other mechanical devices to affix the signature is prohibited.

### **Banking Authorization**

The President and the Vice President for Finance are authorized by the Supreme Council to issue and sign checks and to initiate wire transfers.

## **APPENDIX A: ANNUAL BUDGET PROCEDURES AND SCOPE**

The objective of this Appendix A is to provide guidelines to assist Officers and/or Administrators in developing and managing the Annual Budgets of their respective unit(s). It aims to make thoughtful and intelligent predictions, regarding revenues and expenses that cater for capital planning, the creation of budgets, and financial management, which align with the overall objectives and strategies of the University; thereby, ensuring that the financial resources for operating the business are in place.

This Appendix A outlines the processes of preparation, approval, implementation, and reporting of budgeting. It also includes the University's governing principles (considerations) along with definitions of the role of the University Budget Office, and other University entities involved in the budgetary process.

### **General Considerations:**

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<sup>1</sup> The Appendix is not part of the Financial Policy.

The following considerations reflect the fundamental principles that guide all concerned parties in setting the Annual Budget:

1. Integration

The budget plan is an integral part of the University's plans. It's the expression of the optimal use of resources to meet short-term objectives and to move in the direction indicated by long-term plans. In other words, the University's plans, which incorporate the enhancement and expansion of the physical, programmatic and administrative capacities of the University, shall provide the framework for budget planning. Also, Annual Action Plans shall provide the framework for Annual Budgets.

2. Balance

In a balanced budget, income or revenues are expected to meet expenses.

3. Allocation of Resources

Necessary sources need to be identified and quantified.

4. Communication and/or Coordination

Intensive coordination and cooperation among the parties concerned are necessary to help develop a balanced budget.

5. Forecasting

Budget aggregates should cover the following year operation and planning.

6. Computation

Budget aggregates shall be computed in US Dollar.

7. Budget Records

Budget records shall comply with generally accepted accounting principles and procedures.

**Parties Involved:**

The parties directly involved in the budgeting process are the:

1. President
2. Vice President for Finance
3. University Officers and Administrators, except for advisors and assistants to the President
4. Budget Office
5. University Budgeting and Planning Committee (UBPC)
6. University Council (UC)
7. Board of Trustees (BOT)

**Procedure:**

**A. Preparation and Approval**

Step 1: On March 1<sup>st</sup>, the President shall issue a 'Budget Call Memo' addressed to all concerned University Officers and Administrators. The 'call' shall include guidelines and a brief description of the budgeting process.

Step 2: By April 15, each unit shall submit through their respective VP to the Budget Office (BO) a preliminary budget proposal including both the operational and capital budgets with a brief narrative

of budget highlights, i.e. historical analysis which compares the prior year's actual results to budgeted forecast; along with the next five year budget summary.

Step 3: Upon checking and reviewing each unit's budget proposal with the concerned Officer and / or Administrator, the BO shall submit to the VPF 'the preliminary consolidated unit budget proposals' before April 30.

Step 4: Before May 15, the VPF shall submit the preliminary consolidated University Annual Budget (compilation of all University unit proposals) to the University Budget and Planning Committee (UBPC).

Step 5: After reviewing the budget accounts, checking forecasted expenses and revenues, and carrying out risk analysis, the UBPC, chaired by the VPF, shall approve the consolidated University Annual Budget Proposal and submit it to the University Council (UC) before May 30.

Step 6: The UC shall revise the budget against the University's Mission, and Goals and Objectives of the Strategic Plan. By June 15, The President (Chair of the UC) shall forward the reviewed budget proposal to the Board of Trustees (BOT) for deliberation and approval.

Step 7: The BOT shall carry out a comprehensive review of the proposed budget, and communicate its decision to the President by July 15. Once the budget is approved, the President will announce it to the concerned units, and in particular the BO, which shall upload the approved budget data into the Financial Records System (Intranet).

## **B. Implementation:**

### Salaries

The Business Office disburses salaries and fringe benefits, as per internal rules and regulations without the request of the units concerned. (Requests for overtime, extra work compensation, salary deduction etc. shall follow the procedure of the respective unit.

### Non-Salary Expenses

The Budget Office should clear all non-salary expenses, i.e. whether a budget for such items exists or not.

- *Furniture and Equipment*

All specific furniture and equipment related to a particular unit should be requested with a defined deadline for reception, as per the procedures under PUR102 GENERAL PURCHASING and PUR103 PROJECT PURCHASING These requests go through the Budget Office (electronic copy), which shall approve the availability of the allocated amounts for such expenses in the approved Annual Budget. If cleared, the request shall be forwarded to the Purchasing Department, which is charged with contacting suppliers

The Receiving Committee shall receive the goods and check for quantity and quality, as per the PUR104 RECEIVING AND INSPECTION. In cases involving verification of technical specifications, an expert shall be summoned to provide expert opinion, i.e. lab technician, computer programmer, etc.

Once cleared, the goods shall then be transferred to the unit concerned and a signature shall be obtained upon reception.

- *Travel*

All travel requests shall be managed under the G&A103 TRAVEL AND ENTERTAINMENT procedure.

- *Consumables (office supplies, catalogues...etc.)*

All consumables shall be requested, according to the Procurement Department procedure.

**C. Reporting:**

University units shall abide by their budgeted allocations, and over-or-under expenditures from the Budget trigger review processes that ensure close adherence to the University’s Resource Plan.

A budget summary shall be made available for review by the units concerned on the University Intranet, which contains:

Description	Voted Budget (\$)	Year to Date amount (\$)	Remaining Balance (\$)
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At the end of each academic year, the Budget Office shall prepare a detailed report on the budget execution and the necessary comments on any variance and reasons for such variance.

At the close of the academic year (August 31), the University shall be subject to an accounting and financial audit by an external certified public accounting firm. The results of the annual audit shall be presented to the BOT.

In addition to the audit, the Budget Office conducts a review of individual unit budgets, and the results shall be incorporated into the planning process for future academic years.

**Revision History:**

Revision	Date	Description of Changes	Requested By
0.0	1/1/2007	Initial Release	

**Note:**

All data records, data collection, check lists and reports shall be maintained on appropriate documents and forms, tailored for budget processing in the Budget Office; these include:

- Financial forecast checklists
- Reviewing meeting minutes and reports
- Forecast financial statements.

**Requests for Supplemental Funding**

Requests for supplemental funding can be made during the internal Budget process for proposed projects or planned initiatives.

A request can also be made during the academic year for unplanned projects or initiatives. When such additional funds are requested, the unit must submit a proposal to the Budget Office justifying the expense.

The approval of a supplemental budget request is subject to the availability of funds, and the approval of the concerned parties; UBPC, UC and the BOT, when necessary.

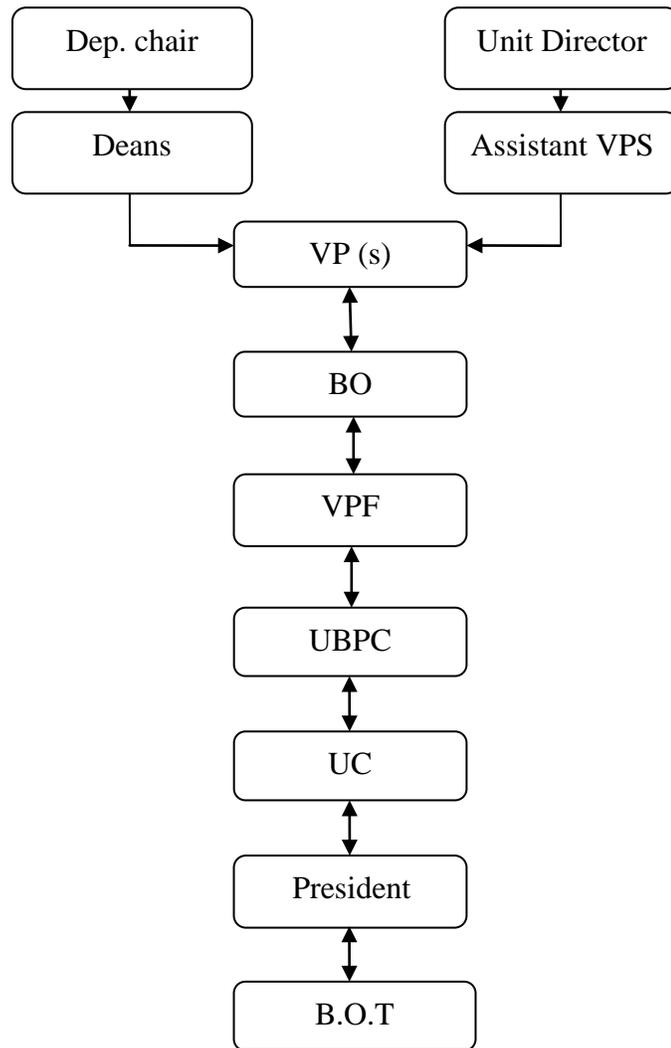
**Document ID**

Document ID	<b>Annual Budget</b>	Print Date <b>mm/dd/yyyy</b>
Prepared By	<b>Preparer's Name / Title</b> _____	Date Prepared <b>mm/dd/yyyy</b>
Reviewed By	<b>Budget Office.</b> _____ <b>/ VPF</b> <b>UBPC.</b> _____ <b>UC.</b> _____ <b>/ President</b>	Date Reviewed <b>mm/dd/yyyy</b> <b>mm/dd/yyyy</b> <b>mm/dd/yyyy</b>
Approved By	<b>B.O.T</b>	Date Approved <b>mm/dd/yyyy</b>

### Annual Budget Process - Action Steps

	Who	What	When
<b>Step 1</b>	President	Budget Call	March 1
<b>Step 2</b>	University Officers &/or Administrators	Preliminary unit budget proposal	April 15
<b>Step 3</b>	Budget Office	Preliminary consolidated unit budget proposal	April 30
<b>Step 4</b>	VPF	Preliminary consolidated University budget proposal	May 15
<b>Step 5</b>	UBPC	Consolidated University budget proposal	May 30
<b>Step 6</b>	UC	Reviewed budget proposal	June 15
<b>Step 7</b>	B.O.T	Budget approval	July 15

### Budget Development - Flow Chart



# Planning Policy

Approved by the COD on March 11, 2015

## Policy Statement

The Notre-Dame University–Louaize (NDU) has undergone rapid growth over the years; this growth has created a greater demand for educational services, and as a result NDU needs to develop explicit statement priorities and orderly plans for its further growth.

## Planning Guidelines

The following policy establishes a planning process to ensure that the University engages in appropriate long-range planning:

- NDU shall develop and maintain a 5-year Strategic Plan to set forth common system goals and planning principles and, as appropriate, system and unit-specific strategies to implement these goals.
- NDU shall develop and maintain a 5-year Facilities Master Plan to reflect the physical development plan of its campuses in response to the academic program priorities and projected growth.
- NDU shall develop and maintain a Financial Aid Budget that is to be increased each year by the percentage increase in tuition fees, or by an amount providing sufficient aid to needy and deserving students.
- NDU shall constantly revise the student tuition fees; the rates may be approved by the Board of Trustees for a single academic year or for a multi-year period. The proposed rates must respect the following: an analysis of various factors, including the comparative rates of similar institutions, student enrollment, anticipated University expense increases, economic indicators, and goals set forth in the University's Strategic Plan. Before adopting such rates, the Board of Trustees may consult members of the University community to share their perspectives. Upon approval by the Board of Trustees, the new tuition and fees are announced to the University community.
- NDU shall develop a Salary Scale for faculty and staff that is to be fairly comparable to that of similar universities in Lebanon.
- NDU shall develop and maintain a Student Enrollment Plan that is to help fulfill the Mission and objectives of NDU.

## Budget Planning

NDU shall operate based on integrated planning links between planning and budgeting to ensure that planning results are considered and reflected as appropriate in budget priorities.

The University Budget is a plan of financial operation embodying an estimate of proposed expenditures and proposed means of financing and managing during a given period.

The development of a budget shall include the preparation, the execution, and the monitoring steps. Such steps will be driven by the University's administrative and financial policies and procedures.

The Budget Plan integrates the University's plans. It's the expression of the optimal use of resources to meet short-term objectives and to move in the direction indicated by long-term plans. In other words, the University Strategic Plan, which incorporates the enhancement and expansion of the

physical, programmatic and administrative capacities of the University, shall provide the framework for budget planning.

Being a primary instrument of fiscal control, the annual budget contains the estimated income and expenditure of activities, which will be carried out in the course of one academic year. NDU budget aims to develop thoughtful and intelligent forecast regarding the revenues and expenses that cater for capital planning and operational performance and create financial management that aligns with the University's plans.

**Planning Responsibility**

The President is ultimately responsible for the overall planning process of the University. The President shall delegate the responsibility of planning to the different University constituents, in accordance with the University organization structure, and proper processes, procedures, and controls.

**Evaluation of Planning Endeavors**

Each year, the University shall evaluate the effectiveness and efficiency of the plans established by the University.

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**Graduate Transferable and Non-Transferable Courses**

Approved by the COD on April 1, 2015

The University Graduate Committee recommended that the rule applied to undergraduate “transferable and non-transferable courses” found on page 69 in the NDU Catalog (2014-2015) be applied to the graduate level.

# Workflow for the production of the University Catalog

Approved by the COD on January 14, 2015

The University Catalog is a one-year publication which lists all academic programs, policies and procedures, as well as the basic institutional information. As the catalog is a major publication of the University, every effort will be made to make the information in it accurate and also the date of publication timely. Below find a proposed guideline to follow in the preparation of the University Catalog that is produced every year and requires proper scheduling, distribution of tasks and coordination.

**Division of labor:** The catalog is divided into sections, each of which is assigned to a faculty, department, office or a unit of the University as shown on pages 2-3.

**Pre-Preparing the material:**

- 1- **Dispatch of the Catalog:** The Registrar’s Office forwards files to the concerned faculties, offices and units. Heads of units, and Deans of the Faculties, through their respective departments, ensure that the material is updated and that track changes are used to facilitate the process at the Registrar’s Office.
- 2- **Collecting the material:** The Registrar’s Office collects complete chapters from the faculties and units in an electronic form. Material should be sent, after being checked, edited and proofread at the source, to the next step. Each chapter would be saved in word format, archived and backed up by the Registrar’s Office for future use.

**Post-Preparing the material:**

- 3- **Assembling:** A person assigned by the University Administration is responsible for bringing together the material, making the arrangement, table of contents, page numbering and index.
- 4- **Editing:** The University editor produces a consistent work in the course of a systematic observance of the Catalog after all corrections are made.
- 5- **Designing:** The Branding & Design Office designs the basic layout and cover page of the catalog and sends it to the printing house.
- 6- **Clearing and Printing:** The blue print of the catalog ready for print is sent to the VPAA, AVPAS and Registrar to be reviewed and obtain the final approval for printing.

**Reception of the Catalog:**

- 7- The Registrar’s Office will receive a stock of around ..... catalogs for distribution to the President’s Office, VPs, Deans, AVPs, Chairpersons, Directors, Heads and as deemed appropriate and upon request. The Admissions Office will receive a stock of around ..... catalogs.

This procedure will be repeated on an annual basis. The annual reprint can proceed rapidly by using previous year’s material and making the necessary corrections to reflect changes in programs, courses, faculty, calendar, fees, etc. before proceeding with steps 3 to 4.

### Normal Production Schedule

1 May	Current year’s word files are sent by the Registrar’s Office to the concerned/respective faculties and units	Registrar
20 May	Corrected / updated files are returned to the Registrar’s Office	Deans, Directors, heads of units
25 May	Post-preparing of the material starts	VPA
10 June	Material is sent to the University Editor	University editor
30 June	Completed layout (first draft) is sent to the VPAA, AVPAS, Registrar to get their final clearance for printing.	VPAA, AVPAS, Registrar
20 July	Branding and Design Office completes layout to be sent to the Printing House.	DBGO
30 July	Cleared for print by VPAA’s Office	VPAA

10 August	Published online in different formats (PDF, printouts, etc.) and precedes the printed version	DCS
30 August	Delivery of the printed copies to the University	DBGO
September	Distribution to different units at University	Registrar

#### Division of material between the various units

Chapter	Responsibility
Message from the President	President's Office
University Directory	President's Office
List of full-time faculty members	Academic Affairs Office
Academic Calendar	Registrar's Office
University Profile	President's Office / Asst. Pres.
Identity, Mission, Vision and Values	President's Office / Asst. Pres.
Historical Overview and Heritage	President's Office / Asst. Pres.
Campus Ministry	University Chaplain
Public Affairs and Communication Office	PA&C Office
NDU Press	PA&C Office
Alumni Affairs Office	PA&C Office / AAO
Research and Graduate Studies	AVPRGS Office
Office of Institutional Research and Assessment (OIRA)	OIRA Office
Office of International Relations	IR Office
Academic Support Services	AVPAS Office
The Libraries	NDU Libraries / AVPAS
Student Affairs Office	Student Affairs – Dean's Office /AVPAS
Admissions Office	Admissions / AVPAS
Admissions Rules and Procedures	Admissions
Registrar's Office	Registrar /AVPAS
Academic Rules and Procedures (Undergraduate)	Registrar
Academic Rules and Procedures (Master's Degrees)	Registrar
General University Requirements	Registrar
Course Numbers and heir Meaning	Registrar
Freshman Program	Registrar
Degrees offered	Registrar
American Friends of NDU	Assistant to President, Planning & Development
Washington D.C. Office	Assistant to President, Planning & Development
FAAD Academic Support Facilities	FAAD
Writing Center	FH
Engineering Laboratories	FE
Science Laboratories	FNAS
Division of Computing Services	Computing Services
Division of Continuing Education	Director of DCE
Faculty of Architecture and Design	FAAD – Dean's Office
Faculty Directory	
Objectives	
Mission, Vision and Values	

Faculty Profile	
Academic department and programs	
Policies and procedures	
Course descriptions	
Faculty of Business Administration and Economics	FBAE – Dean’s Office
Faculty Directory	
Objectives	
Mission, Vision and Values	
Faculty Profile	
Academic department and programs	
Graduate Division	
Undergraduate degrees	
Graduate programs	
Course Descriptions	
Faculty of Engineering	FE – Dean’s Office
Faculty Directory	
Faculty profile	
Mission, Vision and Values	
Academic department and degree programs	
Policies and procedures	
General Education Requirements	
Course descriptions	
Faculty of Humanities	FH – Dean’s Office
Faculty Directory	
Faculty profile	
Mission, Vision and Values	
Academic department and degree programs	
General Education Requirements	
Course descriptions	
Faculty of Law and Political Science	FLPS – Dean’s Office
Faculty Directory	
Faculty profile	
Mission, Vision and Values	
Academic department and degree programs	
General Education Requirements	
Course descriptions	
Faculty of Natural and Applied Sciences	FNAS – Dean’s Office
Faculty Directory	
Faculty profile	
Mission, Vision and Values	
Academic department and degree programs	
Policies and procedures	
Course descriptions	
Faculty of Nursing and Health Sciences	FNHS – Dean’s Office
Faculty Directory	
Mission, Vision and Values	
Programs of study	
Undergraduate degree programs	
Course descriptions	

\*\* The Catalog will include the current Tuition and Financial Aid with a mention that revised fees will be published in September of the current year.

## Course Release Policy

Approved by the COD on July 10, 2015

A full-time faculty member may be eligible for a 3-credit course release per semester, from his/her regular teaching load, with regular pay. This course release shall be granted by the President after the candidate submits a proposal. The remaining teaching load of the faculty member with a course release for a specific semester shall be at least 3 credits during that semester. By the end of the semester, the faculty member shall submit a progress report along with supporting documents for possible renewal on a semester basis.

### A Procedure for a Research Related Course Release

Approved by the COD on July 10, 2015

#### Rationale

Notre Dame University-Louaize, founded as a non-profit, Catholic university which adopts the American model of liberal arts education, has the primary mission of providing quality education. NDU is now recognized as one of the major universities in the country, and in order for it to maintain its competitive edge over other institutions of higher education in Lebanon, it has become essential to create more opportunities for faculty members to conduct research. One such opportunity is to provide researchers with time for research, in light of the senior administration's encouragement to maintain a rich research activity, by offering the possibility to apply for a course release, if faculty members fulfill certain conditions.

#### Definitions:

**Course Release:** A 3-credit time release to conduct research according to one of the following 3 suggested schemes. A course release cost is based on the compensation equivalence to a part-timer teaching 3 cr. per semester or 6 cr. per year, a figure, presently, estimated at around 5400 USD per year.

**Funding Suggestion A: Co-funding:** A University contribution to cover for a course release to a research- active full-timer.

**Funding suggestion B: Buyout:** A researcher's contribution, from a research grant, to, essentially, provide a full, personal, financial contribution in exchange for a course release.

**Funding suggestion C: University support:** A University contribution to cover the cost of a 3-credit course for one semester to a researcher involved in unfunded research.

#### Eligibility

Any full-time faculty member can submit a course release request for a particular semester, provided they carry no overload courses that semester. The applicant may choose any of the following three suggested options:

##### Funding suggestion A: Co-funding

The applicant should present evidence that

- the secured grant as Principal Investigator PI or co-PI is of no less than 6,000 USD per year
- the grant does not allow for the payment of a course buyout
- the researcher does not benefit from a direct payment in the form of salaries or otherwise

**Funding suggestion B: buyout**

The applicant should ensure that

- the secured grant as Principal Investigator PI or co-PI is of no less than 6,000 USD per year
- the budgeted funds are sufficient to remunerate the University for the cost of a course-release

**Funding suggestion C: university support**

The applicant should prove that

- the suggested research requires the requested time off from teaching
- no other sources of funding are available to the researcher

The University contribution to the research is to cover the cost of a 3-credit course for one semester.

**Application Procedure**

The procedure to apply for a course release is as follows:

1. Send a memo (see attached form) and a research proposal (see Appendix) to the department chairperson for his/her evaluation, at least 8 weeks before the start of the semester for which the course release is requested. The Chair forwards the application with his /her recommendation to the Dean who may consult faculty members possessing expertise in the area of the submitted proposal, if necessary.
2. The Dean's recommendation is forwarded to the VPAA who may consult the URC, on the worthiness of the proposal, through the AVPRGS. Upon the recommendation of the VPAA, the President may grant a course release under one of the above funding suggestions.
3. For possible renewal on a semester basis, a separate request, including a progress report, should be submitted following the same procedure described above.
4. For possible renewal past two semesters (more than 6 credits), the applicant must present evidence of at least one related publication in a refereed, international journal. Afterwards, a separate request would be filed following the same procedure described above.

**MEMORANDUM**

---

*To* : Chairperson's name, Chairperson  
*From* : Name of faculty member  
*Subject* : Request for a course release for *semester, year*  
*Reference* : (Optional) Type memo reference number here  
*Date* : Type date here

---

*Text goes here*

\_\_\_\_\_  
Chair's name, Chairperson

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dean's name, Dean

\_\_\_\_\_  
Date

\_\_\_\_\_  
AVPRGS' name, AVPRGS<sup>1</sup>

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Elie Badr, VPAA

\_\_\_\_\_  
Date

\_\_\_\_\_  
Fr. Walid Moussa, President

\_\_\_\_\_  
Date

<sup>1</sup> AVPRGS to attach recommendation of URC

## Appendix

### Elements

Since a proposal is an essential part of the application of any candidate requesting a course release, and to help you reinforce your application by presenting a good proposal, the following are typical points or sections which are normally included in a proposal and which you may elaborate on to varying degrees. Of course, any section may include sub-sections as needed:

#### 1) Introduction

Describe or define the problem and its relevance to the field. A clear statement of the problem should be included in this section along with background material and a literature review of the work that has been achieved thus far. Discuss any shortcomings of the existing work and provide an outline of your own contribution to what has already been done, and how your approach can fill the existing gap(s). Indicate in no ambiguous terms what your research aims at demonstrating.

Provide a brief, qualitative assessment of any results you may have already obtained.

#### 2) Methodology/Approach/Procedure/Instrumentation

Elaborate on the method you introduced in section 1). Provide additional details on how you plan to solve the problem or to tackle the issue under consideration. If a stepwise procedure is part of your work, then it should be included here, at least partially. Experimental/sampling procedures should be presented in a similar manner. If data collection is to be performed, you should indicate the process followed. Likewise, analytical methods should be presented in more or less details. If equations are part of your analytical treatment, the major ones should be shown.

#### 3) Results (may be included in appendices)

Expected results/data should be presented in this section. Your results should motivate continuing and expanding the research. This means that the results should be consistent with the objective(s) of the work proposed in section 1). If not, a question regarding the validity of the research methodology should be raised. If possible, present your results/data in tabulated form or in graphs/charts because they are easier to read and interpret.

#### 4) Discussion

This section is devoted to an assessment of the results in section 3). This is where a critical treatment with complete objectivity is undertaken. The discussion should take into account the advantages drawn from applying your method as well as any shortcomings and limitations that the method has. Highlight the significance of the results obtained and how they corroborate your objective(s), hence the need to continue the work further.

#### 5) Conclusion

This section is a wrap-up of the entire proposal. Here, you briefly restate your problem, indicate the methodology employed, quantify and qualify the results obtained and surmise that a larger and more detailed investigation is in order.

#### 6) References

Every proposal should have references to previous work consulted and deemed relevant to the present work. Normally, this is the last section in any proposal or report if no appendices are present.

#### 7) Appendices

If your proposal contains appendices, they are shown last. This is where results are sometimes included. The appendices, in general, contain material that may be skipped without sacrificing the central idea of the work. In other words, a reader should be able to understand the content of your work without referring to the appendices.

## **FAAD – Architecture Department Changes in Courses**

Approved by the COD on May 6, 2015

**ARP 222 Principles of Architectural Design (2.2); 3 cr.** It is a continuation of GDP 212 with an emphasis on applying three dimensional design principles on architectural settings. The dynamics of motion, light, form, and space are also explored via readings and workshops. Another major topic of this course is the Spatial Analysis of natural and man-made environment and their graphical representation through Bubble diagrams, Site and Area analysis, photography, etc. *Prerequisites:* PHS 101 & MAT 112 (if required).

**ARP 223 Descriptive Geometry (2.2); 3 cr.** Study of geometric projections in space. Emphasis on volumetric development, shade and shadow construction. *Prerequisites:* PHS 101 & MAT 112 (if required).

**ARP 226 Technical Drawing I (2.2); 3 cr.** The course is a studio based course. It aims at the development of students' graphic communication skills. Students will learn 2D as well as 3D techniques of drafting to describe objects of the man made and natural environment. The focus will be on survey of architecture, drafting to scale and rendering techniques, as well as professional sheet layout. *Prerequisites:* PHS 101 & MAT 112 (if required).

**ARP 232 Methodology of Architectural Design (2.2); 3 cr.** This course is a continuation of ARP222, a design studio that covers methodologies used in architectural design, stressing on the different design processes, strategies through direct analysis/ readings of selected projects, and conceptualization and work on small architectural projects. *Corequisite:* ENL 213. *Prerequisites:* MAT 112, MAT 213, PHS 101, ENL 105, ENL 110 (if required).

**ARP 301 Technical Drawing II (2.2); 3 cr.** A continuation of Technical Drawing I, with an emphasis on perspective as a powerful visualization tool for the Architect. The course covers the mechanical construction method same as One, Two and, Three vanishing points perspective. It also introduces the study of shadows (different light directions) and reflections in perspective. *Corequisite:* MAT 213 (if required)., *Prerequisites:* ARP 223, ARP 226.

**ARP 317 Building Technology I (2.2); 3 cr.** A technical and cultural preparation, aiming at assisting the student in resolving technological problems in the design phase and an appropriate use of the different materials in building construction. The course also includes learning and application of the technologies of building construction, aiming to assist students in the execution process of their projects *Corequisite:* ENL 213 and *Prerequisites:* ARP 226, and if required MAT 112, MAT 213, PHS 101, ENL 105, ENL 110.

**ARP 328 Building Technology II (2.2); 3 cr.** Preliminary analysis and design consideration of building support systems to assist students in the execution project. The application of structural, safety codes, electrical and mechanical systems; lighting, water distribution, drainage, heating, ventilating, and air-conditioning (HVAC) are the systems included in this course. *Prerequisite:* ARP 317.

**ARP 551 Construction Detailing Studio I (2.2); 3 cr.** This course is meant to acquaint the student with the elaboration of professional construction document of architectural projects, and the adaptation of standard construction details to various architectural contexts. *Prerequisites:* ARP 224, ARP 328, ARP 311.

**ARP 554 Surveying and Field Surveying (2.2); 3 cr.** Surveying and instrumentation; introduction to optical, photogrammetrical, mathematical, and geometrical principles relevant to photogrammetry and remote sensing; introduction to global positioning system. Field plane surveying; topographic mapping; location survey and route surveying. *Prerequisite:* ARP 311, ARP 328.

**FE – ECCE Department**  
**New course - EEN 445**

Approved by the COD on May 20, 2015

**EEN 445 Computer Network Laboratory (0.2); 1 Cr.** Design, troubleshooting, modeling, and evaluation of computer networks, network addressing, IP routing, route discovery, TCP and UDP, socket programming, IP fragmentation, and Network simulation. *Co-requisite:* EEN 442 or CSC 425.

**Rationale**

**EEN 445** is a new course focusing on the field of Information Technology (IT) which is considered as one of the major recruitment fields for the ECCE Department graduates, especially for CCE students. For this reason, and after the creation of the EEN 442: Computer Networks for the current Academic year, the ECCE department is proposing to create this lab in which the students will become familiar with network equipment and will learn how to design and evaluate several types of data networks. Hence, it will allow students to not only gain hands-on experiences and learn the practical details of various concepts, but also to see how they work together within the big picture of the Internet. We believe that this lab will highly enhance the skills of our future graduates in this major field.

**Implementation Issues:** **EEN 445** is an elective course, it will be added to the pool of Elective Labs 2 for EE and CCE programs.

**FH - Department of Humanities and Religious Studies**  
**Minor in Sociology (15 credits)**

Approved by the COD on November 26, 2014

**Rationale**

The study of society is pertinent for everyone, especially for university students, who will soon have important roles in their social environment. A minor in sociology will be beneficial for students from all majors. It provides them with a basic understanding of such concepts as: culture, education, social class, economy, politics, gender-related issues, and the family in a social context. This understanding is achieved through in-depth analysis of contemporary social issues and problems. Student will learn to apply these concepts to areas such as ethnic and racial relations, women’s studies, the family, deviance, and social inequality among others. Courses in sociology also provide a chance for students to improve their analytic skills, using scientific evidence to investigate, quantify, and interpret social phenomena.

A minor in sociology will enrich students’ understanding of the dynamics of the society in which they live.

**Program Objectives**

1. to develop an understanding and an appreciation in students for the kinds of questions sociologists ask and the kind of explanations they offer
2. to familiarize students with some of the major issues, problems, and findings in sociology
3. to introduce students to the basic skills of field research; sociology is an empirical discipline that constructs theories and draws conclusions based on evidence that can be observed
4. to improve cognitive and communication skills; exercises and regular assignments are intended to enhance students’ abilities to read, analyze, discuss, and write skillfully
5. to approach challenges faced by groups with a sociological perspective, through research, need assessment, design and application of training programs, like team building, group dynamics, conflict resolution, etc.

**Learning Outcomes**

Students who have successfully completed this minor ought to be able to:

1. demonstrate knowledge of the main factors that shape societies
2. critically evaluate the effects of global change on society
3. design a research study in an area of interest
4. use analytical skills to evaluate relevant issues from a sociological perspective

**Course Requirements**

\* All the general rules and regulations for minors at NDU apply.

\* Number of credits for the minor: **15 cr.**

**Courses**

SOL 201	Introduction to Sociology .....	3 cr.
SOL 316	Society and Women.....	3 cr.
SOL 322	Family: Sociological Perspectives.....	3 cr.
SOL 323	Society and Role of Global Intercultural Communication .....	3 cr.
SOL 415	Society, Sexuality, and Education .....	3 cr.

## Course Descriptions

**SOL 201 - Introduction to Sociology (3.0); 3 cr.** This course provides an overview of Sociology as a secular discipline that explores social, religious, political, and economic issues in terms of social institutions, social forces, and group interactions. By so doing, this course explores different structures and combinations of social forces that influence the individual's social behavior, and render him better qualified to become an active citizen of the world. Prerequisite ENL 213

**SOL 316 - Society and Women (3.0); 3 cr.** This course explores significant contributions achieved by women- in addition to those in the family - in education, politics, the workplace, and others fields. The course also focuses on the negative effects on women that may be caused by popular cultures, religion, sexuality, the economy, the family, health care, and government policies, among others. Special focus is placed, on race and ethnicity, religion and social class, and on different forms of gender inequality. Prerequisite ENL 213

**Textbook: Questioning Gender: a sociological exploration**, Ryle-Robyn, SAGE Publications, 2012

**SOL 322 - Family: Sociological Perspectives (3.0); 3 cr.** This course covers a broad understanding of the family in a multi-cultural society; it also offers an analysis of family communication patterns in a series of public and private settings. The course reflects the foundations of a solid family structure. Students are involved in real case studies emphasizing different universal models of family functions. Moreover, students are exposed to different family types and their resulting effects on culture, religion, education and economy. Prerequisite ENL 213

**Textbook: Culturally Diverse Parent-Child and Family Relationships**, Nancy, Boyd Webb. Columbia University Press, 2013.

**SOL 323 - Society and Role of Global Intercultural Communication (3.0); 3 cr.** This course is designed to give students an overview of various issues pertaining to communication across cultures, nationally and internationally. "Global Intercultural Communication" addresses diversity amongst different ethnicities and prepares students from different backgrounds to avoid miscommunication and to interact in a global community using effective communication skills. Prerequisite ENL 213

**Textbook: An Introduction to Intercultural Communication-Identities in a global community**, Jandt, E. F., Sage Publications, Inc. USA, 2013.

**SOL 415 - Society, Sexuality, and Education (3.0); 3 cr.** This course is an exploration of the sociological study of sex, gender, and sexuality. The central themes of the course will be the social processes that influence our gender and sexual identities, and the connections between gender, sexuality, and inequality. Special attention is given to basic characteristics of adolescent sexuality vis-a-vis a wide diversity of sexual attitudes and behaviors in general, and vis-a-vis the Arab world in particular. Prerequisite ENL 213

**Textbook: The Gendered Society Reader**, Michael Kimmel & Amy Aronson, 3<sup>rd</sup> Edition, Oxford, 2008.

**Human Sexuality in a World of Diversity**, Rathus, Nevid, Fichner-Rathus, Herold, McKenzie, 3rd Canadian Edition

## **FH - Department of Humanities and Religious Studies Minor in General Philosophy (18 credits)**

Approved by the COD on November 26, 2014

### **Rationale**

Though every human being is a philosopher in his own right, only very few reach prominence and defy mortality. As the quest for wisdom, Philosophy is behind every human achievement. Above the entrance to his Academy, Plato inscribed the statement “let no one ignorant of geometry enter.” Viewed from this perspective, a Philosophy minor is not only beneficial to all college students, but it would also be for them a very advantageous prerequisite minor to all college majors. It improves critical thinking and develops analytical skills for students. Statistical evidence shows that students who major in philosophy score higher than those nearly in every other major on LSAT, GMAT and GRE exams<sup>2</sup>. It is also worth noting that the philosophical quest for happiness through the good became a common interest for all disciplines, where they all share Ethics as a common field of study.

### **Program objectives**

- Understanding the human quest for truth, and the different ways humans engaged in this quest.
- Showing how philosophy is the foundation of human quest for knowledge – whether theoretical or practical.
- Gaining familiarity with the World Ancient and Modern philosophical traditions
- Developing the ability to assess arguments using logic, critical thinking and argumentative methods
- Gaining knowledge of various philosophical and cultural traditions
- Enabling students to express philosophical ideas through both written and oral forms
- Encouraging students to respect -and interact with - diversity for it is the only proper attitude leading to a genuine dialogue.

### **Learning outcomes**

After completing the minor in general philosophy, students will be able to do the following:

- Address different philosophical problems, using primary philosophical texts
- Critically evaluate attempts to solve a problem
- Demonstrate an understanding of a diversity of philosophical positions/issues
- Evaluate arguments in any given context
- Demonstrate a general understanding of a philosophical background
- Compare different philosophical systems, opinions and visions of the world
- Build one’s own vision on various ethical and existential problems

### **Course Requirements**

The NDU Minor in General Philosophy requires **18 credits**. The courses are:

PHL 232	Ancient World Philosophy.....	3 cr.
PHL 211 <sup>3</sup>	Logic and the Scientific Method.....	3 cr.
PHL 311*	Ethics and the Modern World.....	3 cr.
PHL 333	Medieval World Philosophy .....	3 cr.
PHL 334	Modern & contemporary World Philosophy .....	3 cr.
PHL 411	Philosophical Themes .....	3 cr.

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<sup>2</sup> Verbal vs. mathematical aptitude in academics, by Razib Khan, *in* Discover Magazine, 15 December 2010; also see NPR Article: [http://web.trinity.edu/Documents/philosophy\\_docs/NPR%20Article\\_1.5.2011.pdf](http://web.trinity.edu/Documents/philosophy_docs/NPR%20Article_1.5.2011.pdf)

<sup>3</sup> GRE course

## Course Descriptions

**PHL 211 - Logic and the Scientific Method (3.0); 3 cr.** This course introduces students to what may be called traditional logic. Emphasis is placed on the “Greek” philosophical tradition. Accordingly, there is a focus on Aristotle’s *Organon* and its influence on the corresponding important medieval traditions in Europe. Prerequisite ENL 213

**PHL 232 - Ancient World Philosophy (3.0); 3 cr.** This course introduces Philosophy as the discipline that seeks to find answers to fundamental questions raised by every human, such as ‘what is reality,’ ‘what is knowledge,’ ‘how is it possible to know’, and ‘what is the best way to live’. While showing the distinctive- yet relational- nature of philosophy, with regard to science, art and religion, this course offers basic previews of major landmarks, namely Far East traditions, such as Buddhism, Daoism, Confucianism, and Hinduism, pre-Socratic thinkers – such as Thales, Pythagoras, Parmenides and Heraclitus, classical Greek philosophers – i.e. Socrates, Plato, Aristotle, and the Hellenistic schools of Stoicism, Skepticism and Epicureanism. Prerequisite ENL 213

**Textbook: *Voices of Ancient Philosophy: An Introductory Reader***, edited by Julia Annas, Oxford University Press, Latest edition

**PHL 311 - Ethics and the Modern World (3.0); 3 cr.** This course offers a general analysis of early approaches to ethics in ancient/religious cultures and focuses on the different modern schools of ethics. It also familiarizes students with basic moral codes defining concepts of goodness, right, and obligation, and gives them an overview of the ways these concepts operate. Prerequisite ENL 213

**Textbook: *A Companion to Applied Ethics***, R. G. Frey (Editor), Christopher Heath Wellman (Editor), Wiley-Blackwell; latest edition.

**PHL 333 - Medieval World Philosophy (3.0); 3 cr.** This course covers more than a millennium of philosophical thought, mostly marked by Christianity’s encounter with, and integration of classical Greek philosophy. Medieval World Philosophy includes African and Far East thinkers, all of whom offering different dimensions in their interpretations of the human’s encounter with reality, dimensions such as metaphysics, ethics, logic and philosophy of mind. The distinctive nature of each dimension opens before students new horizons in their quest for the truth. Prerequisite ENL 213

**Textbook: *Medieval Philosophy: Philosophic Classics Volume II***, Edited by Forrest E. Baird & Walter Kaufmann. Upper Saddle: Prentice Hall, Latest edition

**PHL 334 - Modern and Contemporary World Philosophy (3.0); 3 cr.** This course offers a study of the central philosophical themes addressed in the modern/contemporary period from different angles: epistemological, metaphysical, moral, and mystical among others. The main themes of the course are related to the nature of mind and body, the way our consciousness apprehends the external world, the existence of God, rationality and non-rationality, and the quest for freedom. Students are exposed to the ways these themes are addressed by thinkers such as Descartes, Kant, Hegel, J.P Sartre, Gabriel Marcel, Mahatma Gandhi, Debendranath Tagore and others. Inspired by all these thinkers, students are invited to find their own way of experiencing the world, in their journey searching for meaning and truth. Prerequisite ENL 213

**Textbook: *Masterpieces of World Philosophy***, Frank N. Magill, HarperCollins, Latest edition

**PHL 411 - Philosophical Themes (3.0); 3 cr.** This course guides students into a thorough discussion of central themes in philosophy, as addressed by scholars from across the philosophical tradition. Such themes may be: God and human freedom, love and its effects on life; death and how to deal with it; the

nature of suffering, and its effects on our lives; and empathy and its effects on our well-being in times of suffering. All these – and other themes- are treated in the light of the quest for happiness, which ultimately leads to joy, another central theme in Philosophy. Different theories on the mentioned themes are meant to help students enter more deeply into these perennial questions. Prerequisite ENL 213

**Textbook: Happiness: Classic and Contemporary Readings in Philosophy**, Steven M. Cahn, Christine Vitrano, Oxford University Press, latest edition

**Philosophical Inquiry: Classic and Contemporary Readings**, Onathan Eric Adler, Catherine Z. Elgin, Hackett Publishing Company, latest edition

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## **FH - Department of Humanities and Religious Studies Changes in Courses**

Approved by the COD on November 26, 2014

**HUT 305 - Human Thought to 1500 (3.0); 3 cr.** This course takes an interdisciplinary approach in presenting to undergraduate students the diverse roots of our present culture. Great figures/stages of World Civilizations are addressed from pre-history to the Middle-Ages. Also addressed are the Links between civilizations and world cultures, which highlights their most distinctive and influential features. Prerequisite ENL 213

**HUT 306 - Human Thought from 1500 to the Present (3.0); 3 cr.** This course addresses History of World Civilization from the Renaissance and Reformation to the present, covering major philosophic, artistic, scientific and other achievements that have shaped the developments of the modern world. This course is also intended to provide an interdisciplinary approach that helps students appreciate an increasingly interdependent and multi-cultural world (included are economics, literature, religion, arts, and politics). Prerequisite ENL 213

**PHL 101 - Introduction to Philosophy (3.0); 3 cr.** This course is meant to help Freshmen students develop a genuine thinking process, and highlight the exceptional and unmatched value philosophy reveals about the mere fact of being human. Accordingly, Freshmen students are shown the relevance of philosophy to every person, and are guided on how to develop critical thinking.

**PHL 111 - Introduction to Ethics (3.0); 3 cr.** This is a philosophy course that introduces Freshmen students to ethical (moral) thinking, and to what constitutes a moral agent. This course aims at analyzing the considerations that may count as reasons for and against the moral judgments students make. Selected texts on relevant topics treated by different scholars are addressed as illustrations.

**PHL 211 Logic and the Scientific Method (3.0); 3 cr.** (mentioned on page 29)

**PHL 311 Ethics and the Modern World (3.0); 3 cr.** (mentioned on page 29)

**PHL 351 - Lebanese Philosophy (3.0); 3 cr.** This course addresses the Lebanese philosophical attempts from their early Phoenician roots, through the present stage. More emphasis is placed on the philosophers of the modern and contemporary periods. This course is taught in Arabic. Prerequisite ARB 211 or ARB 212, or ARB 231

## **FH - Department of Media Studies Minor in Public Relations (18 credits)**

Approved by the COD on November 26, 2014

**Rationale:** The Department of Media Studies is aiming to start a minor in communication arts with focus on public relations since the market is in need for professionals in this sector. The Lebanese university is the only university in the country offering a major in public relations. Many Lebanese companies and organizations have realized the importance of communication and are seeking for professionals in Public relations who can write and communicate fluently in English. For these reasons, we believe this minor would be very promising for potential students.

### **Required Courses**

COA 252	Principles of Public Relations	3 cr.
JOU 340	Public Relations Techniques	3 cr.
JOU 460	Case Studies in Public Relations	3 cr.

### **Choose 9 credits from the following:**

COA 360	Media Ethics	3 cr.
JOU 323	Web journalism	3 cr.
JOU 341	Public Relations Planning and Events Management	3 cr.
JOU 450	Specialized Journalism	3 cr.
JOU 465	Public Relations and Image Consultancy	3 cr.
JOU 461	Public Relations and Protocol	3 cr.

**COA 252 - Principles of Public Relations (3.0); 3 cr.** This course covers the history, principles and practices of public relations with emphasis on publicity, public opinion and program planning.

**JOU 340 - Public Relations Techniques (3.0); 3 cr.** This course is designed to introduce students to different public relations techniques, tactics, applications and tools to identify and reach specific audiences through various media. Students will focus on analyzing and producing print, including news releases, pitch letters, biographies, proposals, crisis communications, oral messages in addition to other tools to create a public relations kit. Students will also be requested to carry out public relations events following the professional principles in the field. Prerequisite: COA 252.

**JOU 460 - Case Studies in Public Relations (3.0); 3 cr.** This course provides students with hands-on experience, and skill-based performance through the process of evaluating and analyzing the principles of PR campaigns in real-life situations. Students will examine strategies and design their own case studies based on the course materials while taking into consideration diversity, planning programs, and ethical issues. Prerequisite: COA 252.

**COA 360 - Media Ethics (3.0); 3 cr.** This course provides students with a theoretical foundation to deal with ethical issues pertaining to the media such as dubious methods in news gathering, conflict of interests, invasion of privacy, shocking pictures, and intellectual dishonesty, among others.

**JOU 323 - Web journalism (3.0); 3 cr.** This multimedia course examines the emerging forms of information delivered by computer and related convergence of print and broadcast media. Students will practice the latest digital revolution, how to use the technology and how the interactive engagement between journalists and citizens has transformed the business. Blogging, podcasting, video, audio slideshow, social media, web writing and citizen journalism will be examined and practiced. Prerequisite: JOU 210.

**JOU 341 - Public Relations Planning and Events Management (3.0); 3 cr.** The course acquaints students with key public relations skills and event management techniques while providing them with proper exposure to all facets of planning, executing, and analyzing corporate events in-line with corporate goals and objectives. Students are supposed to examine each phase of a successful event and to focus on project management skills needed to research, design, plan, market, co-ordinate, and evaluate events. Special emphasis is placed on the critical role public relations plays throughout the management process. Students are expected to learn the tactics, tools and insights required to create winning events that are successfully publicized. Prerequisite: COA 252.

**JOU 450 - Specialized Journalism (3.0); 3 cr.** This course covers different areas of journalism, such as foreign affairs, sports, arts, lifestyle, environment, business, human rights, and others. Prerequisite: JOU 310.

**JOU 465 - Public Relations and Image Consultancy (3.0); 3 cr.** The course acquaints students with the concept of image consultancy and its tools, while emphasizing the use of these tools in influencing the public perception of corporations, individuals and organizations. It also provides students with the opportunity to review discuss and examine the professional environment and Public Relations' role in achieving business objectives of organizations. It finally introduces students to the techniques and mechanics that are used to master the delivery of winning campaigns to influence public opinion. Prerequisite: COA 252.

**JOU 461 - Public Relations and Protocol (3.0); 3 cr.** The course introduces advanced public relations students to the array of rules, conventions and expectations that professional practitioners should master to interact in high level business settings. It acquaints students with the key aspects of protocol that include the written and unwritten rules of etiquette and cultural norms. This course also provides an overview of how to support business objectives of an organization both in public and private sectors. Moreover, it emphasizes protocol in diplomatic affairs and how public relations tie in with political figures to deliver messages in the world of diplomacy. Prerequisite: COA 252.

**FNAS – Department of Math and Statistics**  
**Amended Program - BS Mathematics (90 cr.)**

Approved by COD on Jan. 21, 2015

**General Education Requirements (27 cr.)**

**Communication Skills in English and Arabic (9 cr.)** Two courses from the subcategory English (6 cr.): ENL213 & ENL223 or ENL230 AND One course from the subcategory Arabic (3cr.): ARB 211, ARB 212, ARB 224, ARB 231, ARB 317

**Philosophy and Religion (3 cr.)** One course from the subcategory Religion: REG 212, REG 213, REG 215, REG 313, REG 314 OR One course from the subcategory Philosophy: ENS 205, PHL 211, PHL 311, POS 345

**Cultural Studies & Social Sciences (6 cr.)**

Two courses from the category Cultural Studies and Social Sciences (6 cr): HUT 305, HUT 306, MUS 210, FAP 215, COA 359, COA 315, NTR 215, ARP 215, PSL 201, SOL 201, SOL 301, SOL 313, BAD 201, ECN 200, ECN 211, ECN 212

**Citizenship (3 cr.)** One course from the category Citizenship (3 cr.): HIT 211, POS 201, POS 210, IAF 301, POS 319, POS 337

**Science & Technology (6 cr.)** One course from the subcategory Mathematics/Statistics/Computer Science (3cr.): CSC 201, CSC 202, MIS 201, MAT 202, MAT 204, STA 202, STA 210 AND One course from the subcategory Natural Sciences (3 cr.): AST 201, BIO 201, BIO 202, BIO 203, CHM 211, ENS 201, ENS 202, ENS 206, GIS 211, HEA 201, HEA 204, NTR 201, PHS 207

Students majoring in Mathematics are not allowed to count MAT courses within the pool of required GER courses.

**Core Requirements (21 cr.)**

1. MAT 213 (Calculus 3)
2. MAT 215 (Linear Algebra 1)
3. MAT 224 (Calculus 4)
4. MAT 235 (Ordinary Differential Equations)
5. PHS 212 (Basic Physics)
6. CSC 212 (Program Design and Data Abstraction I)
7. MAT 303 (Mathematical Logic and Set Theory)

## **Major Requirements (36 cr.)**

### **Required major courses: 30 credits**

1. MAT 325 (Elements of Probability)
2. MAT 333 (Complex Variables)
3. MAT 411 (Algebra I)
4. MAT 421 (Algebra II)
5. MAT 412 (Topology I)
6. MAT 413 (Advanced Calculus I)
7. MAT 423 (Advanced Calculus II)
8. MAT 335 (Partial Differential Equations)
9. MAT 339 (Numerical Analysis)
10. MAT 315 (Linear Algebra II)

### **Elective major courses: 6 credits to be chosen from**

1. MAT 305 (Number theory)
2. MAT 400 (Elementary Differential Geometry)
3. MAT 430 (Topology II)
4. MAT 431 (Vector Spaces and Modules)
5. MAT 460 (Special Topics in Mathematics)
6. STA 315 (Mathematical Statistics)
7. STA 370 (Stochastic Processes)

**Free elective (6 cr.)** needs the consent of the advisor

## **FNHS - Department of Nursing & Health Sciences MS in Human Nutrition (Revised)**

Approved by the COD on Jan. 28, 2015

### **Rationale for a Graduate Program (M.S.) in Human Nutrition**

A graduate program (MS) in Human Nutrition at NDU-Louaize contributes to the University mission in providing “quality education” and preparing “future leaders” in Lebanon. It helps reach all the six NDU vision’s items and considerably contribute to the advancement of the University’s visibility in the local and international scientific communities. It also caters for many of NDU’s values since “Excellence” and “Scholarship” in education are significantly supported by graduate studies, and research in nutrition is a “Service” to the society.

The BS in Nutrition program is in continuous progress and currently hosts the majority of FNHS’s students with a 25% applicant growth in Fall 2010 compared to Fall 2009 according to the statistics sent to the VPAA and Deans by Dr. Naimy on Oct. 5, 2010. In addition, despite their capability of running their own clinic following their BS, almost all our graduates seek graduate studies in Lebanon and abroad. In Lebanon, AUB is the only English speaking university with a MS program in Human Nutrition making it the target of our students who, many of them, repeatedly showed preference to join our program if it existed. In addition students from other institutions contacted the department inquiring about the starting date of the MS program. The success rate in the National Colloquium Exam is similar to that of AUB and USJ, and the standard of the undergraduate senior projects conducted at the main campus resulting in their publication in refereed journals represent two strong indicators in support of the potential of a nutrition graduate program at NDU.

The establishment of a graduate program supports the recruitment of competent researchers/instructors and contributes to lowering the high ratio of part to full time members. In addition, such program should improve the collaboration of NDU with other universities in Lebanon and abroad on joint research projects as is the case currently with the project with Moncton University and anticipated ones with USJ and Kansas Medical Center.

### **Support Facilities**

- 1- Biology lab facilities
- 2- Experimental animal house
- 3- Chemistry lab facilities (including food analyses instrumentation)
- 4- Nutrition lab including indirect calorimetric instrument and a research grade bioelectrical impedance for estimation of complete body composition parameters
- 5- A fully equipped gym
- 6- Library resources including a rich collection of print and electronic resources in the Sciences, including books, journals, online databases, DVDs etc.

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### **The Degree of Master of Science in Human Nutrition**

#### **Admission Requirements**

In addition to the university graduate admission requirements, candidates are expected to have a sufficient background in Human Nutrition or closely related fields. Those who do not meet these requirements may be given provisional admission pending satisfactory completion of a maximum of four undergraduate courses. The credits earned for these courses will not be counted towards the 35 credits required for the M.S. in Human Nutrition.

The Faculty of Nursing & Health Sciences (FNHS) offers a graduate program leading to MS degree in Human Nutrition. Candidates may pursue either a thesis (MS with research) or a non-thesis (Applied MS with considerable course work) program of study. Candidates can do research in the areas of nutrition and psychology, biochemistry, clinical nutrition, sports nutrition or public health nutrition.

**Graduation Requirements**

To satisfy the requirements for the degree of MS in Human Nutrition, the student must complete a total of 35 credits with an overall average of at least 3.0/4.0. The distribution of credits per option is as follows:

**1. Non-thesis option (Applied MS or Course-work option):**

- a. Required courses: 26 credits
- b. Elective courses: 9 credits

**2. Thesis option:**

- a. Required courses: 20 credits
- b. Elective courses: 6 credits
- c. Thesis: 9 credit

The Thesis option provides the necessary background and research experience; this option is more appropriate for students planning to pursue a Ph.D. The course-work option is designed to provide a broader background in Nutrition and is more appropriate for students planning to join the market place. Additional courses may be taken in biology, education, and biostatistics.

**Degree Requirements (Non-Thesis Option)  
(35 Credits)**

- |  | <b># of credits</b> |
|--|---------------------|
| <b>1- Complete the following 10 required courses</b>   | <b>26 cr.</b>       |
| NTR 650, NTR 651, NTR 652, NTR 653, NTR 655, NTR 681, NTR 682, NTR 665, NTR 690, HEA 610.  |                     |
| <b>2- Complete 9 credits from the following list of courses</b>  | <b>9 cr.</b>        |
| NTR 620, NTR 630, NTR 633, NTR 635, NTR 641, NTR 642, NTR 660, NTR 670, HEA 601.   |                     |
| <b>3- Pass one written comprehensive examination. The examination shall be conducted after having completed required courses (other than NTR 665 and NTR 690), with an overall average of 3.0/4.0.</b> |                     |

**Master of Science in Human Nutrition (Non-Thesis Option)  
Suggested Program (35 Credits)**

**Fall Semester I (9 Credits)**

NTR	651	Advanced Macronutrients Nutrition & Metabolism	3 cr.
NTR	653	Advanced Nutrition throughout the Lifecycle	3 cr.
HEA	610	Essentials of Epidemiology and Biostatistics	3 cr.

**Spring Semester I (10 Credits)**

NTR	652	Advanced Micronutrients Nutrition & Metabolism	3 cr.
NTR	650	Research Methods in Human Nutrition	3 cr.
NTR	681	Human Nutrition Seminar I	1 cr.
NTR	---	Elective	3 cr.

**Fall Semester II (9 Credits)**

NTR	690	Research Project	3 cr.
NTR	655	Advanced Medical Nutrition Therapy	3 cr.
NTR	---	Elective	3 cr.

**Spring Semester II (7 Credits)**

NTR	682	Human Nutrition Seminar II	1 cr.
NTR	---	Elective	3 cr.
NTR	665	Applied MS Practicum	3 cr.

**Degree Requirements (Thesis Option)****(35 Credits)**

	<b># of credits</b>
<b>1- Complete the following eight required courses</b>	<b>20 cr.</b>
NTR 650, NTR 651, NTR 652, NTR 653, NTR 670, NTR 681, NTR 682, HEA 610.	
<b>2- Complete 6 credits from the following list of elective courses</b>	<b>6 cr.</b>
NTR 620, NTR 630, NTR 633, NTR 635, NTR 641, NTR 642, NTR 655, NTR 660, HEA 601.	
<b>3- Complete the MS thesis requirements</b>	<b>9 cr.</b>
NTR 691, NTR 692, NTR 693	

**Master of Science in Human Nutrition (Thesis Option)****Suggested Program (35 Credits)****Fall Semester I (9 Credits)**

NTR	651	Advanced Macronutrients Nutrition & Metabolism	3 cr.
NTR	670	Techniques in Nutrition Research	3 cr.
HEA	610	Essentials of Epidemiology and Biostatistics	3 cr.

**Spring Semester I (10 Credits)**

NTR	652	Advanced Micronutrients Nutrition & Metabolism	3 cr.
NTR	650	Research Methods in Human Nutrition	3 cr.
NTR	691	Human Nutrition MS Thesis I	3 cr.
NTR	681	Human Nutrition Seminar I	1 cr.

**Fall Semester II (9 Credits)**

NTR	---	Elective	3 cr.
NTR	692	Human Nutrition MS Thesis II	3 cr.
NTR	653	Advanced Nutrition throughout the Lifecycle	3 cr.

**Spring Semester II (7 Credits)**

NTR	682	Human Nutrition Seminar II	1 cr.
NTR	---	Elective	3 cr.
NTR	693	Human Nutrition MS Thesis III	3 cr.

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**Regulations concerning the “thesis option” of the Master of Science in Human Nutrition  
Jury for the Oral Defense**

After receiving a written note of completion along with three copies of the master thesis from the master thesis advisor, the department chairperson shall appoint the jury for the oral defense and its chairperson, and shall distribute to each member one copy of the master thesis. The jury shall consist of the master thesis advisor and two other members, one of whom is from outside the department.

**Schedule for the Oral Defense**

The oral defense for the master thesis shall be scheduled by the jury chairperson one month from the date of the appointment of the jury at the latest.

**Evaluation and Grade**

The jury shall evaluate the work for the master thesis and assign the appropriate grade by a majority vote. In case of a tie, the committee chairperson shall have the casting vote.

**Final Copy of the Master Thesis**

The student shall submit seven copies of the approved final copy of the master thesis to the jury chairperson who, in turn, shall distribute them to the Library (2 unbound copies), Faculty, Department, and to each member of the jury.

**Graduate Courses: Nutrition**

**NTR 620 - Nutrition Psychology (3.0); 3 cr.** The course explores the relationship between nutrition and psychology, and the characteristics of human behavior that affects people dietary patterns. It covers the biological, emotional, cognitive and environmental functions in dietary adherence. Proficient methods of counseling patients and encouraging changes will be emphasized.

**NTR 630 - Integrated Metabolic Regulation (3.0); 3 cr.** The course provides recent knowledge in metabolic regulation in cells and tissues. Emphasis will be placed on relevant endocrine organs and hormones, mechanisms involved in metabolic regulation, integration of macronutrients metabolism, the nervous system involvement in metabolism, diabetes mellitus, lipoproteins metabolism, and energy balance and body weight regulation.

**NTR 633 - Community and Public Health Nutrition (3.0); 3 cr.** This course covers the broad range of community nutrition research, programs and policies in the world and Lebanon. It addresses the nutrition and health issues facing today’s communities in all the different categories of settings. Students will become familiar with nutrition-related community-based research and programs.

**NTR 635 - Nutrition in Sports (3.0); 3 cr.** The physiology of exercise, macronutrient and micronutrient requirements, and fluid needs of athletes engaged in all forms of sports will be

presented. The course also covers gender specific requirements, appropriate dietary habits pre/post exercise, and the recent knowledge on the role of potential ergogenic aids.

**NTR 641 - Herbs, Foods and Phytochemicals (3.0); 3 cr.** This course covers the health risks and benefits of herbal medicines and food phytochemicals use. The active ingredients of the different herbs and their mode of action along with the clinical applications will be presented.

**NTR 642 - Food and Nutritional Toxicology (3.0); 3 cr.** This course examines potential chemicals in food known to produce adverse effects on human health. It covers the impact of food containing environmental contaminants or natural toxicants, food additives, chemicals in food packaging and nutrient excesses and malnutrition on nutrient metabolism.

**NTR 650 - Research Methods in Human Nutrition (2.1); 3 cr.** The course details the research techniques adopted in nutrition research with human population groups. Research designs used in animal experimental stations will be covered. Emphasis will be placed on criticism of research designs, sampling techniques, measurement and analysis issues, and validity of results. Prerequisite: HEA 610.

**NTR 651 - Advanced Macronutrients Nutrition and Metabolism (3.0); 3 cr.** Advanced discussion of carbohydrates and dietary fibers, lipids, protein, and alcohol nutrition and metabolism.

**NTR 652 - Advanced Micronutrients Nutrition and Metabolism (3.0); 3 cr.** Advanced discussion of the nutritional, biochemical, and physiological aspects of vitamins and minerals in humans.

**NTR 653 - Advanced Nutrition throughout the Lifecycle (3.0); 3 cr.** In-depth discussion of the recent scientific developments in nutrient requirements and related disorders during the different stages of the human life along with the controversial issues present in the literature. Prerequisite: NTR 651, NTR 652.

**NTR 655 - Advanced Medical Nutrition Therapy (3.0); 3 cr.** This course provides an in-depth study of the nutrition-related diseases which affect physiological function and the pathological disorders which result in nutritional disease. The emphasis will be on the following areas: endocrinology, metabolism, gastroenterology and hepatobiliary, cardiovascular, and nephrology. Prerequisite: NTR 651, NTR 652.

**NTR 660 - Special Topics (3.0); 3 cr.** The course covers directed readings by the instructor of present nutritional knowledge provided by the most recent refereed journal publications.

**NTR 665 - Applied MS Practicum (0.3); 3 cr.** The student will be placed in a clinical, community or foodservice practicum setting following which a comprehensive written report shall be submitted.

**NTR 670 - Techniques in Nutrition Research (1.2); 3 cr.** A series of laboratory modules emphasizing quantitative and qualitative methods and experimental analysis used in nutrition research and sensory evaluation of food. The modules entail lab preparations or method applications in field settings, data collection and analysis, and interpretation in a comprehensive written report. Instrumentation and relevant software utilization will be emphasized.

**NTR 681 - Human Nutrition Seminar I (0.1); 1 cr.** A recent topic in nutrition will be presented by MS students with critical analysis of the methods and data reported in refereed original articles following the approval of the instructor.

**NTR 682 - Human Nutrition Seminar II (0.1); 1 cr.** A recent topic in nutrition will be presented by MS students with critical analysis of the methods and data reported in refereed original articles following the approval of the instructor. Prerequisite: NTR 681.

**NTR 690 - Research Project (0.3); 3 cr.** The student prepares a review paper of the literature on a recent topic in nutrition following the approval and continuous supervision of the instructor.

**NTR 691 - Human Nutrition MS Thesis I (0.3); 3 cr.** Independent research guided by a supervisor toward completing the requirements of the MS thesis; Research Proposal.

**NTR 692 - Human Nutrition MS Thesis II (0.3); 3 cr.** Independent research guided by a supervisor toward completing the requirements of the MS thesis; Thesis Research. Prerequisite: NTR 691.

**NTR 693 - Human Nutrition MS Thesis III (0.3); 3 cr.** Independent research guided by a supervisor toward completing the requirements of the MS thesis; Thesis writing up. Prerequisite: NTR 692.

#### **Graduate courses: Health Sciences**

**HEA 601 - Introduction to Public Health (3.0); 3 cr.** This course provides an introduction to public health. Topics include: scope and core disciplines of public health, core functions and essential services of public health, determinants of health, approaches to health intervention, values and ethics of public health, and current issues in public health.

**HEA 610 - Essentials of Epidemiology and Biostatistics (3.0); 3 cr.** This course provides basic principles of epidemiology and biostatistics. It covers definition of epidemiology, types and sources of epidemiological data, epidemiological study designs, data analysis and methods of statistical inference.

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### **Minor in Nutrition – Changes**

Approved by the COD on March 27, 2015

**The change is the following:** remove the course NTR 330 from the required courses and allow students to choose two instead of one course from the pool of courses, including NTR 330.

#### **Courses to be completed: 15 credits**

- **NTR 201** Basic Human Nutrition; 3cr. or **NTR 210** (Human Nutrition - 3 cr.
- **NHS 205** Physiology for Nursing & Allied Health Professions - 3cr.
- **NTR 435** Nutrition in the Life Cycle - 3cr.
- Choose **two** of the following courses:

**NTR 313** Foodservice Management - 3 cr.

**NTR 330** Community Nutrition - 3 cr.

**NTR 335** Sports Nutrition - 3cr.

**NTR 450** Dietetics Counseling and Communication - 3 cr.

# **FNHS - BS in Physical Therapy**

Approved by the COD on June 17, 2015

## **Rationale behind the Suggested Program**

FNHS has submitted a proposal for a professional Doctorate in Physical Therapy program and received the needed approvals from the University Curriculum Committee, Board of Deans then, and at the University Council with a note to consult with the Ministry of Education and Higher Education regarding possible legislation requirements as it was the first time to be proposed in Lebanon. The Ministry's response was conservative stating that there are no precedents for such a program and it cannot consider it prior to the appropriate legislations.

Recently, USJ has started the program and we were informed that they had already had a Bachelor in Physical Therapy that may be needed at NDU to help the consideration of the program especially that a precedent has already been created.

The requirement for minimum post-baccalaureate university studies for entry level into the profession of physical therapy has been revised by professional and accrediting bodies: entry level into the profession of Physical Therapy is after completing 5 years of study in Europe (300 ECTS), and in few years it will be after completion of a DPT program (3 years of study post bachelor degree) in the USA. At the present time in Lebanon physical therapists graduate after four years of post-baccalaureate university studies for them to be granted access to the profession.

Lately, the Order of Physical Therapists in Lebanon has been exploring the possibility of implementing the DPT program in Lebanese universities so that to amend profession entry level academic requirements in line with the changes taking place in Europe and USA. This is an opportunity to cease by NDU, where there is room for innovation and professionalism.

## **Support Facilities**

- 1- Biology lab facilities
- 2- Library resources including a rich collection of print and electronic resources in the Sciences, including books, journals, online databases, DVDs etc.
- 3- Lab for practice with all the adequate material: complete cage for pulley-therapy, electrotherapy machines, treatment tables, demonstration material, demonstration software, etc. (Estimated cost is 50,000 USD), plus dissection lab for learning anatomy on cadavers (Biology Lab).

## **Admission Requirements**

For Admission requirements to the degree of BS in Physical Therapy, refer to the section entitled "Undergraduate Admission" of the university catalog.

## **Graduation Requirements**

To receive the degree of BS in Physical Therapy, a student must fulfill all requirements of the degree program, complete all required courses, accumulate a total of 135 credits with an overall grade point average (GPA) of at least 2.0/4.0 and a minimum GPA of 2.3/4.0 in both the core and major requirements, and clear all accounts with the university. Candidates for degrees are reminded that grades of "I" assigned during the last semester to courses required for graduation will result in delaying of graduation.

## **Degree Requirements (135 Credits)**

### **General Education Requirements (27 cr.)**

#### **a) Communications Skills in English and Arabic 9 cr.**

- Two courses from the subcategory English (6 cr.) ENL 213 and ENL 223 or ENL 230

- One course from the subcategory Arabic (3 cr.) ARB 211, ARB 212, ARB 224, ARB 231, ARB 317

**b) Philosophy and Religion 6 cr.**

- One course from the subcategory Religion (3 cr.) REG 212, REG 213, REG 313, REG 314

- One course from the subcategory Philosophy (3 cr.) ENS 205, PHL 211, PHL 311, POS 345

**c) Cultural Studies and Social Sciences 6 cr.**

Two courses from the category Cultural Studies and Social Sciences (6 cr.) HUT 305, HUT 306, MUS 210, FAP 215, COA 359, COA 315, NTR 215, ARP 215, PSL 201, SOL 201, SOL 301, BAD 201, ECN 200, ECN 211, ECN 212

**d) Citizenship 3 cr.**

One course from the category Citizenship (3 cr.) HIT 211, POS 201, POS 210, POS 240, IAF 301, POS 319, POS 337

**e) Science and Technology 3 cr.**

- One course from the subcategory Mathematics/Statistics/Computer Science (3 cr.) CSC 201, MAT 201, MAT 202, MAT 204, MAT 211, STA 202, STA 210

OR

- One course from the subcategory Natural Sciences (3 cr.) AST 201, BIO 202, BIO 203, ENS 201, ENS 202, ENS 206, HEA 201, HEA 204, NTR 201, PHS 207, PHS 211

**Core Requirements (6 cr.)** NHS 204; NHS 205

**Major Requirements (99 cr.)**

DPT 203 DPT 204 DPT 205 DPT 206 DPT 207 DPT 208 DPT 213 DPT 214 DPT 215 DPT 216 DPT 217 DPT 218 DPT 270 DPT 271 DPT 272 DPT 273 DPT 274 DPT 320 DPT 321 DPT 322 DPT 323 DPT 324 DPT 325 DPT 326 DPT 327 DPT 328 DPT 329 DPT 330 DPT 331 DPT 332 DPT 333 DPT 334 DPT 375 DPT 376 DPT 377 DPT 378 DPT 379 DPT 380 DPT 381 DPT 382 DPT 384 DPT 435 DPT 436 DPT 438 DPT 439 DPT 440 DPT 443 DPT 447 DPT 448 DPT 449 DPT 452 DPT 453 DPT 454 DPT 661 DPT 462 DPT 463 DPT 464 DPT 465 DPT 466

**Free Electives (3 cr.)**

**The number of credits per semester**

Year	Fall	Spring	Summer
	(credits)		
I	15	15	5
II	15	15	5
III	15	15	5
IV	15	15	

**Courses Description**

**NHS 204 Anatomy for Nursing & Allied Health Professions (3.0); 3 cr.** Covers gross normal structure of human body organ systems; accompanies “Physiology for Nursing and Allied health Professions”. *Corequisite:* DPT 270

**NHS 205 Physiology for Nursing & Allied Health Professions (3.0); 3 cr.** Provides an understanding of the basic principles of human body’s functioning under normal healthy conditions

necessary for nursing and allied health professions' students. It outlines principles of physiology along with a survey of various body systems (homeostasis; metabolism; nervous, muscular, cardiovascular, respiratory, gastrointestinal, renal, reproductive and endocrine systems). It serves as a foundation for the clinical topics covered in health sciences programs. *Corequisite*: DPT 271

**DPT 203 Exercise Physiology (3.0); 3 cr.** This course covers acute and chronic adaptations that occur in the human body in response to physical activity/exercise. An emphasis is placed on metabolic, cardiopulmonary, and musculoskeletal adaptations to exercise. Students will become familiarized with the basic principles of exercise testing and exercise prescription. *Corequisite*: DPT 272.

**DPT 204 Neurosciences (3.0); 3 cr.** This course will examine the structure and function of the human nervous system with emphasis on functional considerations related to clinical practice. It will include a study of microscopic and macroscopic anatomical components of the central, peripheral, and autonomic nervous system with emphasis on the organization of functional systems. The neurophysiological principles which are related to neural transmission and function of the various pathological conditions affecting nervous system will be emphasized and students will be expected to correlate the clinical manifestations with the anatomic location of the pathology.

**DPT 205 Biomechanics of Human Movement (3.0); 3 cr.** This course details concepts in biomechanics that govern human movement and explain evaluation and intervention strategies used by physical therapists. It emphasizes the biomechanical analysis of internal and external forces that affect human movement as well basic concepts related to muscle mechanics. The effects of forces on body tissues, movement patterns, and the manipulation of objects are also discussed. Additionally, it covers the pathomechanics of selected anomalies resulting from congenital malformations, bone and soft tissue injuries, or disease.

**DPT 206 Motor Development (2.0); 2 cr.** This course covers normal development of gross motor, fine motor, oral motor, psychosocial, cognitive, language, self-care & play skills, and examine their relationships. The normal and abnormal development of gross motor skills will be contrasted throughout the lifespan. *Prerequisite*: DPT 204.

**DPT 207 Motor Control & Learning (3.0); 3 cr.** This course explores the theories and principles of motor control & learning as they apply to the analysis of human movement across the lifespan. It also focuses on gait analysis of normal and pathological gait patterns. *Prerequisite*: DPT 206.

**DPT 208 Massage (2.0); 2 cr.** This course covers the basic massage techniques employed in rehabilitation of patients, as well as the specific techniques of reflex massage.

**DPT 213 Muscle Testing (2.0); 2 cr.** This course covers all the muscles of the human body. The student will learn to examine and assess muscular function individually or functionally. *Prerequisite*: NHS 204. *Corequisite*: DPT 273.

**DPT 214 Prosthetics and Orthotics (1.0); 1 cr.** This course covers the different types of prostheses and orthotics for the upper and lower limbs. The student will learn how to manage patients of different ages with a prosthesis and/or an orthotic. *Corequisite*: DPT 274.

**DPT 215 Foundations of Physical Therapy (2.0); 2 cr.** This course introduces the student to the history, development, and current issues of the physical therapy profession and the Order of Physical Therapists in Lebanon. The Guide to Physical Therapist Practice and Code of Ethics, as well as legal and regulatory issues related to the physical therapy profession will be examined.

**DPT 216 Professional Communication (1.0); 1 cr.** This course prepares the student for the clinical application of advanced communication skills in the helping relationships with patients and their families. Emphasis is placed on the psychosocial aspects of care, interdisciplinary communication and cultural competence.

**DPT 217 Foundational Physical Therapy Examinations (2.0); 2 cr.** This course provides the student with information on how to screen, measure, and examine patients with impairments

associated with basic physiological dysfunction, movement dysfunction and disability. The student will learn the normal values used as references to detect insufficient or excessive values.

**DPT 218 Foundational Physical Therapy Interventions (2.0); 2 cr.** This course covers the basic physical therapist patient interventions used to ensure safe patient interaction. Interventions include: patient communication, safe and effective patient positioning and movement, use of assistive ambulatory devices, protective bandaging/taping, basic exercise (with effect across the lifespan), splinting and compression garments, superficial thermal modalities, and hydrotherapy.

**DPT 270 Human Anatomy Lab (0.2); 1 cr.** This course will provide students the opportunity to develop palpation skills of different anatomical structures and landmarks, and to appreciate the differences of a variety of tissue types while learning clinical surface anatomy. The course uses a regional approach and is designed to correlate with the Human Anatomy course. *Corequisite:* NHS 204.

**DPT 271 Human Physiology Lab (0.2); 1 cr.** This course is designed to provide the student with the adequate tools to measure the different functions of the human body systems in a lab. *Corequisite:* NHS 205.

**DPT 272 Exercise Physiology Lab (0.2); 1 cr.** This course is designed to provide the student with tools for fitness assessment and exercise physiology measurements on field and in the lab. *Corequisite:* DPT 203.

**DPT 273 Muscle Testing Lab (0.2); 1 cr.** During this course, the student will practice muscular assessment for all the muscles of the human body taken individually or functionally. *Corequisite:* DPT 213.

**DPT 274 Prosthetics and Orthotics Lab (0.2); 1 cr.** This course allows the students to manipulate orthotics, braces, splints, etc. The student will be familiarized with the different shapes and usages. *Corequisite:* DPT 214.

**DPT 320 Diagnosis and Management of Surgical Conditions (1.0); 1 cr.** This course is designed to provide students with opportunities to develop, integrate, and apply knowledge and skills necessary to examine and treat individuals with surgical diagnoses (pre and post-operative conditions). Topics covered in this course include wound management, lymphedema, etc.

**DPT 321 Clinical Pathophysiology I (3.0); 3 cr.** This course presents the pathogenesis of common disease processes or conditions in addition to the clinical presentation of signs and symptoms. It also describes the effects of pathologic processes on the individual's functional abilities and limitations.

**DPT 322 Clinical Pathophysiology II (1.0); 1 cr.** This course presents the pathogenesis of common disease processes or conditions in addition to the clinical presentation of signs and symptoms. It also describes the effects of pathologic processes on the individual's functional abilities and limitations. *Prerequisite:* DPT 321.

**DPT 323 Active and Passive Joint Mobilizations (2.0), 2 cr.** This course covers the different techniques of passive and active mobilization of the body joints.

**DPT 324 Education, Delegation, and Supervision in Physical Therapy (2.0); 2 cr.** This course covers principles of education, delegation, and supervision as pertaining to physical therapy patient care management.

**DPT 325 Cardiopulmonary Patient Management (2.0); 2 cr.** This course will introduce students to common diseases/conditions involving the cardiovascular and pulmonary systems, examination and evaluation procedures, diagnostic procedures, goal setting, and interventional strategies. The role of the Physical Therapist in providing appropriate rehabilitative exercise programs and risk factor modification education for persons with, or at risk of developing, cardiovascular and/or pulmonary disease will be emphasized. *Corequisite:* DPT 375.

**DPT 326 Musculoskeletal Patient Management I (2.0); 2 cr.** This course introduces the student to musculoskeletal examination, evaluation, diagnosis, prognosis, and intervention for impairments,

functional limitations, and disability in clients with pathologies of the cervical spine and upper extremities. *Prerequisite:* DPT 213. *Corequisite:* DPT 376.

**DPT 327 Musculoskeletal Patient Management II (2.0); 2 cr.** This course introduces the student to musculoskeletal examination, evaluation, diagnosis, prognosis, and intervention for impairments, functional limitations, and disability in clients with pathologies of the thoracic spine, lumbar spine, pelvis, and lower extremities. *Prerequisite:* DPT 326. *Corequisite:* DPT 377.

**DPT 328 Musculoskeletal Patient Management III (2.0); 2 cr.** This course covers specific interventions for common musculoskeletal problems of the spine, sacroiliac joint and extremities: Mézières, Souchard, Mitchell, myofascial stretching, etc. *Prerequisite:* DPT 327. *Corequisite:* DPT 378.

**DPT 329 Neurological Patient Management I (2.0); 2 cr.** This course covers the management of adults with complex central nervous system (CNS) and multisystem disorders and co-morbidities. Examination, evaluation, diagnosis, clinical decision making, prognosis, decision algorithms, standardized assessments and outcome measures and interventions are stressed. Stroke, Parkinson's disease, amyotrophic lateral sclerosis and multiple sclerosis are highlighted. Availability and appropriate use of wheelchair and assistive technologies is presented. *Corequisite:* DPT 379.

**DPT 330 Neurological Patient Management II (2.0); 2 cr.** This course focuses on the management of children and adults with complex central nervous system (CNS), multisystem disorders and co-morbidities. Students continue to examine, evaluate, diagnose, develop clinical decision making skills, develop prognoses, follow decision algorithms, employ standardized assessments and outcome measures and interventions. Cerebral palsy, neurodevelopmental disabilities, muscular dystrophy, spinal cord injury, acquired brain injury, cerebellar disorders, and facial palsy are emphasized. Electromyography, nerve conduction velocity, functional electric stimulation, and alternate interventions such as Tai Chi, virtual reality and video gaming are also presented. *Prerequisite:* DPT 329. *Corequisite:* DPT 380.

**DPT 331 Rheumatology Patient Management (2.0); 2 cr.** This course covers the pathology, physical therapy indications and treatment, assessment and evaluation of the functional capacities of different patients with rheumatological diseases. *Corequisite:* DPT 381.

**DPT 332 Pediatrics Patient Management (1.0); 1 cr.** This course involves the examination and treatment of the pediatric population using an interdisciplinary approach as well as specific physical therapy interventions. The etiology and clinical features of common diseases/ disorders observed in the pediatric population will be emphasized. *Corequisite:* DPT 382.

**DPT 333 Integumentary Patient Management (1.0); 1 cr.** This course introduces the practice management model for patients with pathology or impairment of their integumentary system. It covers the histology & pathologies of the integument, & discusses the assessment and management of pathological processes & wounds of various etiologies. Students will learn to examine patients with impairments or functional limitation and disability as a result of primary and secondary pathologies of the integument. They will also learn screening techniques for secondary management of the integumentary system in many physical therapy settings and across the lifespan.

**DPT 334 Physical Therapy for Older Adults (1.0); 1 cr.** This course will examine foundational, clinical, and behavioral sciences pertinent to the examination, evaluation, and planning of treatment interventions for older adults. *Corequisite:* DPT 384.

**DPT 375 Cardiopulmonary Patient Management Lab (0.2); 1 cr.** This course focuses on the integration of decision-making capabilities with the necessary psychomotor skills required for the examination and treatment of patients with cardiovascular and pulmonary diseases. Activities covered include: pulse palpation, blood pressure assessment, auscultation of heart and breath sounds, basic EKG interpretation, diagnostic and functional exercise testing, interpretation of lab values, bronchial hygiene, and airway clearance techniques. *Corequisite:* DPT 325.

**DPT 376 Musculoskeletal Patient Management I Lab (0.2); 1 cr.** During this course, the student will practice techniques for the musculoskeletal examination, evaluation, diagnosis, prognosis, and intervention for impairments, functional limitations, and disability in clients with pathologies of the cervical spine and upper extremities. *Corequisite:* DPT 326.

**DPT 377 Musculoskeletal Patient Management II Lab (0.2); 1 cr.** During this course, the student will practice techniques for the musculoskeletal examination, evaluation, diagnosis, prognosis, and intervention for impairments, functional limitations, and disability in clients with pathologies of the thoracic spine, lumbar spine, pelvis, and lower extremities. *Corequisite:* DPT 327.

**DPT 378 Musculoskeletal Patient Management III Lab (0.2); 1 cr.** During this course, specific interventions for common musculoskeletal problems of the spine, sacroiliac joint and extremities are practiced. *Corequisite:* DPT 328.

**DPT 379 Neurological Patient Management I Lab (0.2); 1 cr.** During this course, the student will practice interventions for adults with complex central nervous system (CNS) and multisystem disorders and co-morbidities. *Corequisite:* DPT 329.

**DPT 380 Neurological Patient Management II Lab (0.2); 1 cr.** During this course, the student will practice interventions for children and adults with complex central nervous system (CNS) and multisystem disorders and co-morbidities, including handling skills such as proprioceptive neuromuscular facilitation. *Corequisite:* DPT 330.

**DPT 381 Rheumatology Patient Management Lab (0.2); 1 cr.** During this course, the student will develop skills in physical therapy treatment, assessment and evaluation of the functional capacities of individuals with different rheumatological diseases. *Corequisite:* DPT 331.

**DPT 382 Pediatrics Patient Management Lab (0.2); 1 cr.** This course emphasizes methods for examination, goal setting, and intervention for the pediatric population. *Corequisite:* DPT 332.

**DPT 384 Physical Therapy for Older Adults Lab (0.2); 1 cr.** This course will provide students with the opportunity to develop skills in the provision of physical therapy services for older adults. *Corequisite:* DPT 334.

**DPT 435 Issues in Women's Health: Gynecology, Obstetrics, Osteoporosis and Breast Health (2.0); 2 cr.** This course introduces physical therapy practice for evaluation and treatment of pelvic floor dysfunction, problems related to pregnancy, osteoporosis, and other disorders specific to women.

**DPT 436 Physical Therapy Interventions for Gynecology and the Urinary System I (2.0); 2 cr.** This course involves the examination and treatment as well as specific physical therapy interventions – manual therapy, electrotherapy, exercises, etc. of patients with urinary or gynecologic disorders, especially women's health and pregnancy. The etiology and clinical features of common diseases/disorders will be emphasized.

**DPT 438 Topics in Geriatric Rehabilitation (2.0); 2 cr.** Geriatric rehabilitation offers many complex themes of inquiry. This course covers topics such as forms of long term care, communication with the confused and depressed, legal and ethical issues, sexuality, drugs and the elderly, nutrition, fitness and wellness, family issues, incontinence, falls, effects of exercise, motivation, and sociological and psychological aspects of aging.

**DPT 439 Temporo-Mandibular Joint Patient Management (2.0); 2 cr.** This course covers specific physical therapy interventions for the treatment of patients with temporo-mandibular joint disorders. The etiology and clinical features of common disorders will be emphasized.

**DPT 440 Vestibular Patient Management (2.0); 2 cr.** This course covers specific physical therapy interventions and maneuvers for the treatment of patients with vestibular disorders. The etiology and clinical features of common diseases/disorders will be emphasized. The student will learn how to treat the vestibular system dysfunctions and improve the patient's notions of equilibrium and balance perception. *Prerequisite:* DPT 204.

**DPT 443 Therapeutic Exercise (2.0); 2 cr.** This course covers the different foundations and techniques of therapeutic exercise, and its use it to correct bodily impairments, improve musculoskeletal functions, or maintain a state of well-being.

**DPT 447 Electrotherapy (2.0); 2 cr.** This course covers the physical approach of electricity, its applications and uses in the clinical field, and the scientific basis of electrical therapy. The student will also be familiarized with the electrical therapy equipment manipulation and use.

**DPT 448 Introduction to Psychomotor Therapy (2.0); 2 cr.** This course covers the perceptive, affective and relational components of motion. The major theoretical concepts of physical activity will be studied through practical experiences. The student will also learn to control the aquatic environment through personal practical experiences related to the study of movement characteristics in the water – swimming-pool. This course prepares the student to handle a patient whose rehabilitation must occur in the water. *Prerequisite:* DPT 206.

**DPT 449 Applied Psychomotor Therapy (2.0); 2 cr.** This course provides the student with the theoretical and practical knowledge for psychomotor education and rehabilitation of healthy, physically, and/or mentally handicapped children. *Prerequisites:* DPT 207, DPT 448.

**DPT 452 Positioning as a Pediatric Therapeutic Modality (1.0); 1 cr.** This course introduces adaptive seating and positioning in pediatric physical therapy, neurophysiological, biomechanical, and functional rationale.

**DPT 453 Exercise for Persons with Spinal Cord Injuries (1.0); 1 cr.** This course provides a review of etiology and pathology of spinal cord injury, current methods of exercise and electrical stimulation systems and their physiological effects on the individual.

**DPT 454 Balance for the Neurologic Patient (1.0); 1 cr.** This course introduces balance evaluation and treatment concepts for patients with neurological deficits.

**DPT 461 Clinical Practicum I; 2 cr.** During this first training period (200 hours), the student will be familiarized with the hospital functioning and watch a surgeon at work in the operation room, especially during an orthopedic surgery. The student will also accompany and observe the physical therapist in charge throughout his daily tasks at the hospital, with a progression of learning opportunities, application techniques, and professional behavioral abilities.

**DPT 462 Clinical Practicum II; 2 cr.** During this training (200 hours), the physical therapy student will be familiarized with the functioning of hospitals and rehabilitation centers. This training allows the student to integrate the theoretical and practical courses in the real practice of physical therapy. *Prerequisite:* DPT 461.

**DPT 463 Clinical Practicum III; 2 cr.** Onsite clinical learning experience (300 hours). *Prerequisite:* DPT 462.

**DPT 464 Clinical Practicum IV; 2 cr.** Onsite clinical learning experience (300 hours). *Prerequisite:* DPT 463.

**DPT 465 Clinical Practicum V; 2 cr.** Onsite clinical learning experience (300 hours). *Prerequisite:* DPT 464.

**DPT 466 Introduction to Clinical Posturology (2.0); 2 cr.** This course introduces the student to posturology and its relations with neurosomatic disorders. *Prerequisite:* DPT 407.