

PHILADELPHIA UNIVERSITY



DEPARTMENT OF BASIC SCIENCES AND MATHEMATICS

UNDERGRADUATE HANDBOOK MATHEMATICS PROGRAM

2007–2008

TABLE OF CONTENTS

1. Introduction
 - University Admission
 - Entrance to the Math program
 - History of the department
2. The Mathematics Program
 - Why major in Mathematics?
 - Career Opportunities for a Mathematics graduate
 - Curriculum and Study System
 - Short Course Descriptions
 - Course Dependencies
3. Supporting Programs
 - Seminar
 - Quality Assurance
 - Government Exam (ETS)
 - Facilities
 - Extracurricular
4. Academic Issues
 - Assessment and Examinations
 - Monitoring of student progress
 - Dishonesty Conduct
 - Extended Leave of Absence
 - Conflict Resolution
 - Student Council
5. Mathematics Department Online

– 1 –

INTRODUCTION

Welcome to the Department of Basic Sciences and Mathematics. We hope your stay as a Mathematics major at Philadelphia University will be an enjoyable and fruitful academic experience. In this handbook you will find all the important general information you need to guide you through our department and the Mathematics Bachelor's degree program. This handbook has been carefully prepared for you, keeping in mind that familiarity with our system is necessary for smooth sailing through our program.

It is recommended as well that you read the **University Student's Guide**, which contains a more detailed rules and regulations for all Philadelphia University students. Handbooks issued by the various departments are all governed by the rules and regulations stated therein and are meant to supplement, not supplant, it. Throughout this handbook we therefore will refer the reader to the University Student's Guide when the needed information is not specific to the Department.

A soft copy of this handbook may also be downloaded from the Internet using the address <http://www.philadelphia.edu.jo/math/program/handbook.pdf>

1.1 Admission

Admission criteria are issued by the Ministry of Higher Education, which governs all private universities. A minimum average of 55% in the Tawjihi Examination (or equivalent) is required for admission into any private university in Jordan.

First year students will be given a full timetable for the introductory activities, and registration must be completed in accordance with times specified therein. Returning students must also register during that week.

Students are advised to check the online academic calendar at University's webpage at <http://www.philadelphia.edu.jo/arabic/event.asp>

1.2 Entrance into the Mathematics Program

In addition to the above, the Department requires prospective students to have completed high school Calculus and College Algebra, or their equivalent in order to be admitted into the program. A separate admission test may also be given by the Department's Admission Committee if a student does not come from a nationally accredited academic institution.

All students registered in the Mathematics program at Philadelphia University will be required to maintain a grade point average of at least 60% at the beginning of the fifth semester in order to be retained in the major. We follow the University's regulations concerning students' academic probation, warning, and dismissal from the program, as given in the University Student's Guide.

1.3 Brief History of the Department

The Department of Basic Sciences is one of the two departments in the Faculty of Science, the other being the Biotechnology and Genetic Engineering Department. From the beginning we have been offering service basic science courses such as Mathematics, Physics, and Chemistry to students from other Faculties. (Biology is now offered through the Biotechnology Department.) In 2003, however, a Bachelor's degree program in Mathematics was established. To reflect this addition, the department is now officially called the Department of Basic Sciences and Mathematics.

Our department currently employs twelve full-time faculty members, eleven of whom hold Doctorate degrees from various backgrounds in Mathematics, Physics, and Chemistry. While continuing to serve other faculties, we also strive to improve the quality of teaching and research and to expand as an independent department in fields of science we cover. Since our program is relatively new, the number of our students is still small. This gives the advantage of a very high teacher-to-student ratio.

– 2 –

THE MATHEMATICS PROGRAM

Mathematics is not only a fascinating subject of great intrinsic beauty, its wide applicability to the natural and social sciences is also universally recognized. The Mathematics program offers a four-year Bachelor of Science degree which is fully accredited with the Ministry of Higher Education. Our curriculum emphasizes the development of analytical skills and independent thinking, which are vital in an ever-changing world.

Ours is a strong program designed to make Mathematics both a strong discipline and fun. We integrate classroom technology into traditional and modern teaching methods. Our curriculum is slightly oriented toward producing well trained Mathematics teachers. However it will also accommodate those who wish to pursue graduate studies and/or other careers in the job market.

Our teaching staff are well qualified in their fields in both Pure and Applied Mathematics. These include Algebra, Analysis, Dynamical Systems, Mathematical Education, Mathematical Physics, Number Theory, Optimization Techniques, Statistics, and Topology.

2.1 Why Major in Mathematics?

Mathematics has commonly been recognized as the queen of science. But in addition to its role as a mere language and foundation of scientific studies and computing, Mathematics has now found an increasingly significant place in many diverse fields, from management to medicine and from government to psychology. An undergraduate degree in Mathematics will open the way to a future filled with wide opportunities for jobs and professions. More and more, government positions require skills involving the direct use of mathematics. In addition, mathematics professionals such as actuaries, accountants, and statisticians are quite high in demand worldwide.

A major in Mathematics, furthermore, will make the person literate and knowledgeable in many fields by way of intellectual discipline. This alone will enable the person to make a positive contribution to society. It also prepares those who wish to pursue an advanced degree in related fields like statistics, actuarial science, cryptography, or mathematical modeling.

Apart from preparing the students for future jobs, the goals of an education in mathematics include learning to

- calculate, manipulate and solve problems
- read and think critically
- write with clear logic and prove, defend, and explain ideas
- think abstractly and creatively
- formulate and test hypotheses
- construct mathematical proofs and arguments
- appreciate the beauty, power, and preciseness of mathematics

2.2 Career Opportunities for a Mathematics Graduate

A graduate in Mathematics can go for a teaching career, which is indeed both challenging and rewarding, or else they can easily fit into an advanced study in almost any related field, whether basic or social sciences. Outside the educational institution, a graduate with a Mathematics degree can find a job as

- an actuarial scientist
- a statistical analyst
- an accountant
- a cryptanalyst
- a defense and security analyst
- a government employee in a variety of positions

2.3 Curriculum and Study System

An academic year is comprised of two compulsory semesters and an optional summer session:

- Fall Semester: from October to January
- Spring Semester: from February to June
- Summer Session: from July to August (optional)

The university follows the credit-hour system. A total of 132 credit hours is needed for the Bachelor of Science Degree. The maximum study load is 18 credit hours for the Fall and Spring Semesters and 9 credit hours for the Summer Session.

The 132 credit hours are distributed as follows.

(I) University Requirements: 24 Credit Hours

1. University Compulsory

- 21 credit hours for Jordanians
- 15 credit hours for Non-Jordanians

Course #	Course Name	Credit	Prerequisite
110103	Arabic Language Skills (1)	3	----
111100	Military Science *	3	----
111133	Human Thought & Civilization (1)	3	----
130101	English Language Skills (1)	3	----
130102	English Language Skills (2)	3	130101
710101	Computer Skills (1)	3	----
111101	Civic Education *	3	

* Optional for non-Jordanians .

2. University Electives

- 3 credit hours for Jordanians
- 9 credit hours for Non-Jordanians

110102	Arabic Language Skills (2)	3	110101
111111	Introduction to Sociology	3	----
111112	Introduction to Psychology	3	----
111113	Principles of Logic	3	----
111121	Issues in Contemporary Thought	3	----
111135	Human Thought & Civilization (2)	3	----
111142	Communication and Society	3	----

111153	Science & Society	3	----
140103	Foreign Language (French 1)	3	----
140104	Foreign Language (Italian 1)	3	----
140106	Foreign Language (Hebrew 1)	3	----
210121	History of Science	3	----
240151	Man and the Environment	3	----
240141	Principles of Nutrition	3	----
330101	Introduction to Administration	3	----
340101	Principles of Macro Economics	3	----
420150	Human Rights	3	----
530100	Principles of Therapeutics	3	----
620105	Automobile Essentials	3	----

* Military Science is compulsory for Jordanian students and elective for non-Jordanian students

(II) Faculty Requirements: 18 Credit Hours

212101	General Chemistry (1)	3	----
210101	Calculus (1)	3	----
210231	Introduction to Probability & Statistics	3	----
240101	General Biology (1)	3	----
210122	Fundamentals of Scientific Knowledge	3	-----
710104	Computer Skills 2 for Science Faculties	3	710101

(III) Major Requirements: 90 Credit Hours

1. Compulsory Courses: 66 Credit Hours

250102	Calculus (2)	3	210101
250151	Discrete Mathematics	3	----
250201	Intermediate Analysis (1)	3	250102
250203	Ordinary Differential Equations	3	250201
250232	Probability Theory	3	210231 250201
250241	Linear Algebra (1)	3	210101
250251	Set Theory	3	250102
250261	Modern Euclidean Geometry	3	250251
250305	Partial Differential Equations	3	250203
250311	Real Analysis (1)	3	250251
250312	Complex Analysis	3	250311
250313	Number Theory	3	250102
250332	Mathematical Statistics	3	250232
250341	Linear Algebra (2)	3	250241
250342	Abstract Algebra (1)	3	250251
250371	Numerical Analysis	3	250241 250203
250372	Computer-Aided Mathematics	3	----
250411	Real Analysis (2)	3	250311
250442	Abstract Algebra (2)	3	250342
250461	Topology	3	250311
250471	Mathematical Modeling	3	250102 250241
280472	Computational Number Theory	3	710102

2. Supplementary Courses: 12 Credit Hours

211104	Applied Physics	3	----
210381	Problem Solving	3	*
210481	Instructional Strategies for Teaching Mathematics	3	**
210482	Pedagogy of Mathematics	3	**

* Student must have passed 60 credit hours

** Student must have passed 90 credit hours

3. Elective Courses: 12 Credit Hours from the following list

210331	Design of Experiment	3	210231
210332	Applied Probability	3	210231
211316	Computational Physics	3	211104
250321	History of Mathematics	3	----
250351	Graph Theory	3	250251
250383	Psychology of Learning & Learning Theories	3	*
250412	Functional Analysis	3	250311
250451	Mathematics Philosophy	3	*
250462	Algebraic Topology	3	250461 250342
250473	Advanced Applied Mathematics	3	250311
250474	Control Theory	3	250241
250476	Game Theory	3	250241
250491	Seminar	1	*
250492	Special Topics	3	*

* Subject to departmental approval

2.4 Short Course Descriptions

A brief course description for each of the Mathematics courses is given below. A complete list of textbooks and references for all these courses can also be downloaded from the Internet at the address <http://www.philadelphia.edu.jo/math/syllabi/textbooks.pdf>

- 100 level

210101 Calculus I

An introduction to analytic geometry, differentiation of algebraic and transcendental functions, applications of differentiation, and a brief introduction to integration.

250102 Calculus II

Techniques of integration, Conic sections, Polar coordinates, Intermediate forms, Improper integrals, Vectors, Sequences, Infinite series, Convergence tests, Taylor series representations. Prerequisite: 210101

250151 Discrete Mathematics

Sets, relations, and functions. Mathematical induction. Recursion. Propositional logic. Counting techniques. Elements of combinatorics. Introduction to graphs and trees.

- 200 level

210231 Introduction to Probability and Statistics

This is an introductory course in statistics. The course is planned so that students learn the basic concepts needed in probability theory and statistics. It familiarizes students with statistical terms such as population, sample, sample size, random variable, mean, variance, and much more. The course covers materials such as collecting data, graphical methods, descriptive statistics, regression and correlation, probability basics, confidence intervals and hypothesis testing.

210235 Biostatistics

This course provides a practical introduction to statistical methods used in a variety of disciplines, such as health sciences, pharmacology, and nursing. All concepts introduced in the course are illustrated with examples that demonstrate principles. Materials covered are Picturing Distributions With Graphs, Numerical Summaries, The Normal Distribution, Standard Normal Distribution, Correlation and Regression, The Sampling Distribution of The Mean, Confidence Intervals, and Test of Hypotheses for the Mean.

250201 Intermediate Analysis

Multidimensional analytic geometry, functions of several variables, vector-valued functions, partial derivatives, gradient, maxima-minima problems and applications, double and triple integrals; potential fields; flux; Green's divergence and Stokes' theorems. Prerequisite: 250102

250203 Ordinary Differential Equations

First and second-order equations; numerical methods; special functions; Laplace transform solutions; higher order equations. Prerequisite: 250201

250232 Probability Theory

This course provides a practical introduction to probability theory. The materials covered in this course represent the cornerstone of much of what will be needed in statistical inference in the future. All concepts introduced in the course are illustrated with examples that demonstrate principles. The course covers materials such as Counting Techniques, Probability Axioms, Discrete and Continuous Random Variables, The Moment Generating Function, The Bivariate Distribution, Joint, Marginal, and Conditional Distributions, Independence, Correlation and Covariance.

250241 Linear Algebra I

Vector spaces, matrices, determinants, Linear transformations, Gauss Jordan elimination, eigenvalues and eigenvectors, theory and applications. Prerequisite: 210101

250251 Set Theory

Logic and proofs, Sets, set operations, cardinal numbers, finite sets, orders, axiomatic set theory, well-ordering, cardinals and ordinals, the axiom of choice. Prerequisite: 250102

250261 Modern Euclidean Geometry

Axioms of Euclidean geometries, isomorphisms and models, Finite geometry, Neutral geometry, equivalence of the parallel postulate, hyperbolic geometry. Projective geometry. Prerequisite: 250251

- 300 level

210331 Design of Experiments (Elective Course)

This course is designed to introduce the student to the basic ideas of experimental design and accompanying analysis. It also enriches student's knowledge and understanding of the statistical methods as it pertains to the design and analysis of experiments. Emphasis will be on conceptual understanding and application to practical problems. Students completing the course are expected to be knowledgeable in the basic experimental designs. Materials covered in the course include Introduction to Statistics and Data Analysis, Inferential Data Analysis for Simple Experiments, One Factor Designs, One Factor Blocking Designs, Latin Square Designs, Two- and General Factor

Factorial Experimental Designs, 2K Factorial Designs. Prerequisite: 210232

210332 Applied Probability (Elective Course)

Spaces, discrete and continuous random variables, transformations, expectations, generating functions, conditional distributions, law of large numbers, central limit theorems. Prerequisite: 210231

250305 Partial Differential Equations

Partial differential equations, orthogonal functions, Sturm-Liouville boundary value problems, Green's functions, variational methods, and other topics. Prerequisite: 250203

250311 Real Analysis I

Analytical study on real variable, basic topology, metric spaces, sequence and series, power series, limit, derivatives, integrations, the Riemann Stieltjes Integral. Prerequisite: 250151

250312 Complex Analysis

Functions of one complex variable, limits, derivatives, analytic functions, integrations, contour integrals, Cauchy's Theorem, Fundamental Theorem of Algebra, Power Series, Convergence, Residues and Poles. Prerequisite: 250311

250313 Number Theory

Studies of the integers: divisibility, prime numbers, the Fundamental Theorem of Arithmetic, the theory of congruences and applications, primitive roots and applications, quadratic reciprocity, and selected cryptographical applications. Prerequisite: 250102

250321 History of Mathematics (Elective course)

An overview of different subjects of mathematics from the historical point of view. Topics may vary. Origin of numbers, the ancient Orient, works of Socrates, Euclid, Archimedes, Islamic period, western Europe, transition to modern mathematics, discovery of Calculus, development of algebra, geometry, probability, selected topics.

250332 Mathematical Statistics

This is an introductory course in mathematical statistics. Topics will include Functions of Random Variables, Sums of Random Variables, Order Statistics, Point Estimators and Their Properties, Confidence Intervals and Test of Hypotheses. Prerequisite: 250232

250341 Linear Algebra II

An advanced study of linear algebra: vector spaces, subspace, linear independence, bases, linear transformation, determinants, eigenvalues, diagonalization, inner product space, linear operator, selected topics on canonical form. Prerequisite: 250241

250342 Abstract Algebra I

Studies in the theory of groups, cyclic groups, isomorphism theorems, the fundamental theorem of finite abelian groups, symmetry groups, Sylow theorems or other selected topics. Prerequisite: 250251

250351 Graph Theory (Elective Course)

Studies in graph theory, Eulerian circuits, trees, shortest path problem, matchings, graph coloring, planar graph, Hamiltonian cycles, matrical representations, digraphs, various applications and algorithms. Prerequisite: 250251

250371 Numerical Analysis

Techniques of numerical solutions to various mathematical problems, solutions of equations, Newton's method, zeros of polynomials, interpolations, numerical differentiations and integrations, numerical differential equations, initial value problems, systems of linear equations, matrix inverse, determinants, and eigenvalues. Prerequisite: 250241, 250203

250372 Computer Aided Mathematics

Symbolic computational packages and scientific visualization through examples from calculus and geometry. Prerequisite: department agreement

250381 Problem Solving

Concepts in problem solving; practice in solving a wide variety of mathematical and logical problems; techniques for attacking problems; building mathematical models. Prerequisite: 60 credit hours

250383 Psychology of Learning and Learning Theories (Elective Course)

- 400 level

250411 Real Analysis II

Continuation of 250311, series of functions, uniform convergence, the Stone Weierstrass theorem, the exponential function, algorithmic function, Fourier series, differential forms, vector analysis, Lebesgue measure. Prerequisite: 250311

250412 Functional Analysis (Elective Course)

Compact operators and Fredholm theory, Banach algebras, harmonic analysis, differential equations, nonlinear functional analysis, and Riemann surfaces. Prerequisite: 250311

250442 Abstract Algebra II

Studies in rings and fields, ideals, integral domains, rings of polynomials, vector spaces, extension fields, Galois theory, finite fields or selected applications. Prerequisite: 250342

250451 Philosophy of Mathematics (Elective Course)

Selected topics from philosophy of mathematics and historical point of view.

250461 Topology

Point-set metric spaces, topological spaces, product spaces, identification spaces, compactness and connectedness, countability, separation axioms, complete metric spaces. Prerequisite: 250311

250462 Algebraic Topology (Elective Course)

Fundamental groups and covering spaces, separation theorems in the plane, the Seifert-van Kampen theorem, homology of surfaces, and related topics. Prerequisite: 250461, 250342

250471 Mathematical Modeling

Construction, development, and study of mathematical models for real situations; basic examples, model construction, Markov chain models, models for linear optimization, selected case studies. Prerequisite: 250102 and 250241

280472 Computational Number Theory

Basics of number theory: divisibility, primes, congruences; Overview of Public-Key Cryptography, RSA algorithm, Factoring algorithms, Pseudoprimes, Primality testing, topics in prime number search and related algorithms. Prerequisite: 710102, 250313

250473 Advanced Applied Mathematics (Elective Course)

Covers integral theorems of vector analysis, complex variables, series solutions to differential equations, Laplace and Fourier transforms, and use of mathematical software languages such as Maple and Mathematica. Prerequisite: 250311

250474 Control Theory (Elective Course)

Topics in optimization problems; linear, nonlinear, and integer programming. Prerequisite: 250241

250476 Game Theory

Basic theorems, concepts, and methods in the mathematical study of games of strategy; determination of optimal play when possible. Prerequisite: 250241

250481 Instructional Strategies for Teaching Mathematics

The student will study and participate in instructional activities and strategies for mathematics that depart from the lecture style; e.g., cooperative learning or open-ended problem exploration. Students will design and conduct a mathematics lesson using such a strategy. Prerequisite: must have completed 90 credit hours.

280482 Pedagogy of Mathematics

Prerequisite: must have completed 90 credit hours

280491 Seminar

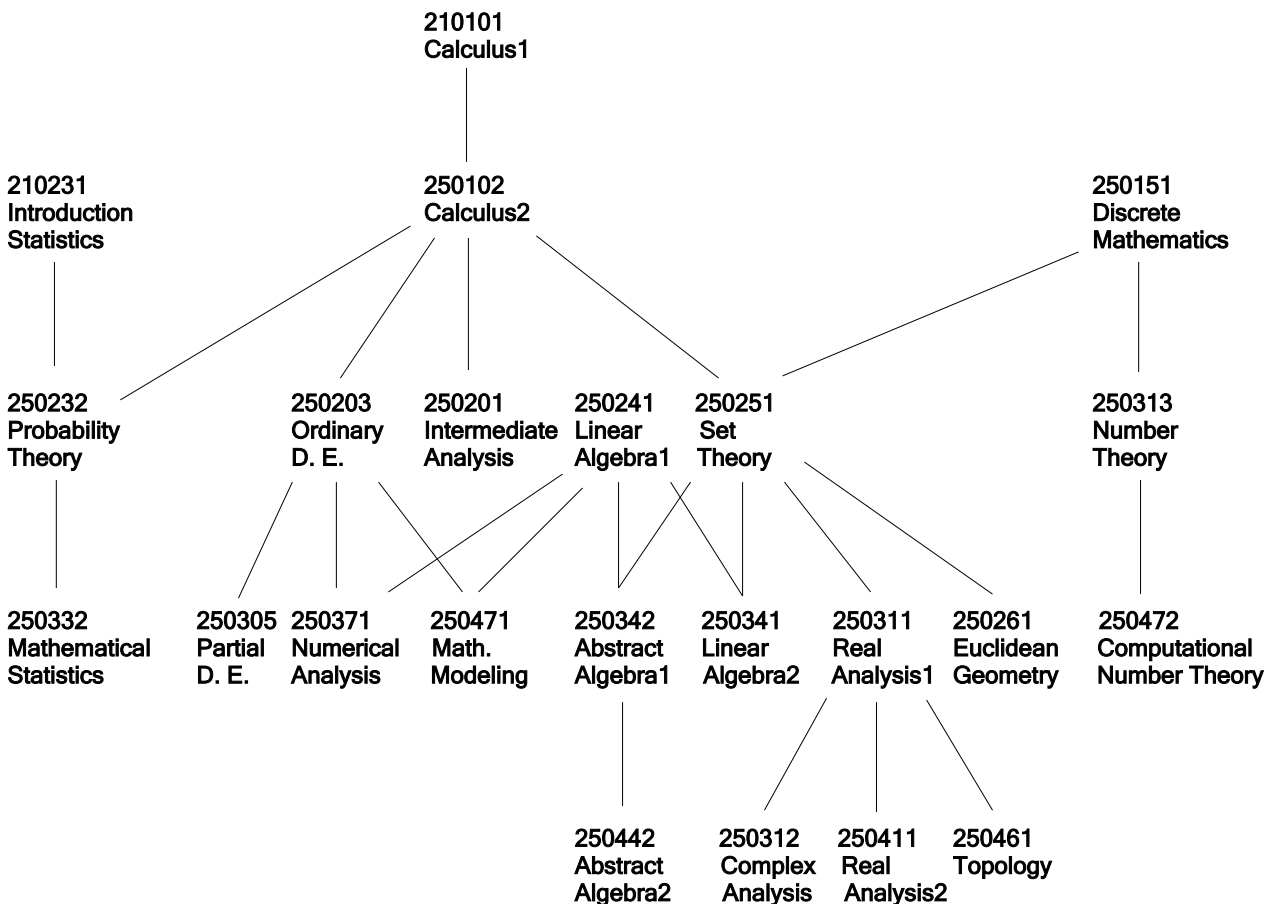
Students' seminar series. Prerequisite: Department's agreement

280492 Special Topics

Individual guided study. Prerequisite: Department's agreement

2.5 Course Dependencies

In the following chart you will see the dependencies between some core Mathematics courses. The purpose of this chart is to present a graphic representation of the dependencies among the various courses and to suggest the best sequence of courses the student may follow. We refer the student to the tables in section 2.3 to see the prerequisite for each course.



SUPPORTING PROGRAMS

Academic life consists of more than just classroom teaching and learning activities. Both students and teaching staff will be involved in supporting programs whose purpose is to enhance the educational experience through participation in research, tutoring, programming, and many other stimulating activities.

3.1 Seminars

The Department holds bi-weekly seminars with topics ranging through all current fields of mathematical research, Statistics, Chemistry, Physics, and other basic sciences and scientific education. Students are greatly encouraged to attend, and senior students are expected to participate as well in presenting at least one seminar topic in their final year.

We have an ongoing “Math is fun” lecture series, which is an open-for-all seminar with a popular topic presented in a rather non-technical language for the more general audience. The purpose of this series is also to introduce students to some of the current research topics and to encourage them to do further study on the subject. In the past semesters we have had talks covering topics such as “Chemistry and Life,” “Fermat's Last Theorem”, “Chemical Imaging”, etc.

3.2 Quality Assurance

The Department of Basic Sciences and Mathematics adheres to the Q.A. standards of excellence. This ensures that our teaching staff in all their teaching activities follow the same quality of work, which is well documented and organized according to the Q.A. requirements. Some of the standards we follow are described below...

3.3 Government Exam (ETS)

Graduating students are required by the Ministry of Higher Education to take an assessment test in their field of study. For our graduating Mathematics majors we conduct semester-long tutoring in order to prepare them for this examination. The areas of mathematics included in the exam are divided into the following five groups:

- Calculus and Differential Equations
- Real and Complex Analysis
- Probability and Statistics
- Abstract Algebra, Linear Algebra, and Number Theory
- Geometry and Topology

3.4 Facilities

The learning environment at the department of Basic Sciences and Mathematics provides the

students with supporting facilities and technical assistance.

Library

The main library, located next to the Computer Center, supports research facilities and houses hundreds of textbooks and international journals.

Classrooms

Lecture halls in our department are located in the tenth floor of the Science Faculty building. Each room has 40 seats and is equipped with a whiteboard and a projector screen.

Seminar Room

A seminar room is reserved for meetings by members or staff, conferences, and seminars. It is located at the tenth floor next to the Dean's office.

Computers

Computing facilities are provided by the University at various laboratories across the campus. Some of the available services are listed here.

- Computer laboratories: PC, LAN, UNIX, Workstation, Internet
- E-Learning Phoenix Training Center
- UNESCO Computer Training Program (ICDL)
- Software packages: Mathematica, Minitab, etc.
- CISCO Computer Training Center
- Microsoft Training Center

Bookshops

Local bookshops provide photocopying services and stationaries at convenient locations across the campus. The nearest stall for our department is located at the tenth floor, Science Faculty building. The main bookshop of the University is in the Business Administration Building.

MATHEMATICS DEPARTMENT ONLINE

The Department of Basic Sciences and Mathematics maintains its own website at the Philadelphia University domain name. The complete URL for the department is <http://www.philadelphia.edu.jo/math/>

It is highly recommended that each student get himself/herself familiar with the contents of the site as it provides updated news and important announcements concerning all our academic activities. We provide here the sitemap of our pages in order to guide you through the entire contents.

Basic Sciences Home

<http://www.philadelphia.edu.jo/math/index.htm>

The frontpage (index file) of the site. It contains a short list of most recent additions to the site, updated periodically.

About the Department

<http://www.philadelphia.edu.jo/math/dept.htm>

Who we are and a brief history of the department.

Mathematics Program

<http://www.philadelphia.edu.jo/math/math.htm>

Information about the Mathematics program, in fewer details than provided in this handbook. From this page you will be able to download a number of pdf files such as,

- **Mathematics Brochure**
<http://www.philadelphia.edu.jo/math/program/brochure.pdf>
A one-page brochure for promotional purposes, to be distributed to prospective students and interested companies.
- **Course Requirements**
<http://www.philadelphia.edu.jo/math/program/course.pdf>
A list of compulsory and elective courses for the Bachelor's degree in Mathematics. This is duplicated in Section 2.3 of this handbook.
- **Four-Year Study Plan**
<http://www.philadelphia.edu.jo/math/program/plan.pdf>
Course requirements, as above, distributed over four-year (8-semester) plan as a suggestion for a possible plan for a student to finish the program in 4 years.
- **Department Handbook**
<http://www.philadelphia.edu.jo/math/program/handbook.pdf>
This is where this handbook is posted on the site.

Teaching Staff

<http://www.philadelphia.edu.jo/math/staff.htm>

The list of our teaching faculty members, each links to the lecturer's C.V. and other personal pages he/she has created.

Staff's Office Hours

<http://www.philadelphia.edu.jo/math/hours.htm>

A table displaying each teaching staff's office hours, office room and telephone numbers.

Course Descriptions

<http://www.philadelphia.edu.jo/math/course.htm>

Short descriptions of all Mathematics courses. This is the same information included in Section 2.4 of this handbook.

Current Syllabi

<http://www.philadelphia.edu.jo/math/syllabi.htm>

For each course taught at the Department, we provide a copy of the most recent syllabus as given by the respective instructor. This is the same copy distributed to students in the classroom at the beginning of the semester. All files are in pdf format. On this page you will also be able to download a copy of the complete list of textbook and references for all the Mathematics modules. The address is <http://www.philadelphia.edu.jo/math/syllabi/textbooks.pdf>

Exam Schedules

<http://www.philadelphia.edu.jo/math/exam.htm>

This is the page where we announce schedules for all examinations: First Exam, Second Exam, and Final Exam. You should check this page at least a week before the scheduled exam time listed in the syllabus. Exam schedules, especially for multi-section courses, are subject to change at short notice due to a heavy classroom reservation schedules by the entire Faculty.

Seminars & Events

<http://www.philadelphia.edu.jo/math/event.htm>

Announcements for all recent and upcoming seminars, conferences, talks, student's activities, etc.

Contact Us

<http://www.philadelphia.edu.jo/math/contact.htm>

Contact info for the Department of Basic Sciences and Mathematics.