

		3 CH	Prereq:	None
900096	Computer Literacy	3	0	

The course provides basic understanding essential facts about the latest version of Windows operating system. It also introduces the basic knowledge and the latest components of Word, Excel, Access and PowerPoint. Hands on experiences are stressed. The course is practical and implemented in the lab.

		3 CH	Prereq:	None
900097	Remedial Arabic Communication Skills	3	0	

This course introduces basic skills in Arabic reading comprehension, writing, listening, and speaking through examining selected literary and cultural texts, to prepare them to study Arabic Communication Skills (1).

		3 CH	Prereq:	None
900099	Remedial English Communication Skills	3	0	

This course helps students enhance their ability to communicate in English through the four basic skills – reading, writing, listening, and speaking. The course provides grammatical forms and structures that are used in real life situations. Stimulating and informative passages are included to hone students’ reading comprehension skills and widen their horizons. There are also writing exercises that are relevant to students’ experiences.

		1 CH	Prereq:	None
900101	Sports (1)	1	3	

This course provides practical basic skills and rules for basketball and football. It also includes practical skills in teamwork, leadership, fair play, and responsibility. It enhances students’ knowledge in health and sports culture – doping, weight controlling, and age-related illnesses.

		3 CH	Prereq:	None
900102	Sports	1.5	1.5	

This course enhances students ‘practical skills in fitness methodologies in order to retain healthy life style. Theoretical and practical parts are included to further enhance students’ basic skills in some sports such as, basketball and football, in addition to sports values such as teamwork, leadership, fair play, and responsibility.

		1 CH	Prereq:	None
900110	Cultural Development (1)	1	2	

This course covers both cultural content that aims at developing intellectual skills among students that extends beyond the classroom into their local communities, through presentations and discussion papers in class, and an introduction to speech communication which emphasizes the practical skill of public speaking, including techniques to reduce speaker anxiety, and the use of visual aids to enhance speaker presentations. Its goal is to prepare students for success in typical public speaking situations and to provide them with the basic principles of organization and skills needed for effective speeches.

		3 CH	Prereq:	None
900111	Military Science	3	0	

This course provides knowledge about the military, the role of the Jordan armed forces in defending the country, and the military's role in development and community service. The course is taught with lectures and field trips.

		3 CH	Prereq:	None
900114	Civilization & Thought	3	0	

This course aims to broaden and deepen students' understanding of the foundations of Western Civilization, while at the same time creating an awareness of the multiple regional influences and cultural interactions that shaped these foundations. It aims to do that primarily through a study of some of the "Great Books" that participated in shaping Western thought. The primary texts will be discussed to enable the students to personally interact with them imaginatively as well as critically.

		3 CH	Prereq:	None
900115	Social Ethics	3	0	

This is an interdisciplinary course that provides a way of thinking about fundamental questions of right and wrong, what is the relationship between the individual and society as well as moral relativism vs. moral absolutes. Social ethics addresses these broad questions, with a special focus on how moral reasoning and evidence can be applied to understanding real-life problems and issues. The concept of culture as well as the major philosophical foundations of ethics is discussed. Engage students with morality and ethical communication skills and prepares them to become more responsible, active, and participatory citizens, who respect and preserve the bounty and beauty of the earth and its diverse cultures.

		3 CH	Prereq:	None
900116	Bio-Ethics	3	0	

This course focuses on issues involving medical care and biotechnology. The course subjects extend to other areas where human life and death are involved such as euthanasia, abortion, genes, genomes, and health care. The course examines these issues ethically from many sides, weighing the reasons people have a certain mindset with considerations towards forming a well-supported position and creating a world in which all can live. The course seeks to develop moral wisdom, understand essential facts, and have moral virtue.

		3 CH	Prereq:	None
900117	Civic Awareness	3	0	

This course provides students with an understanding of civic life, politics, and government. It also raises the knowledge and the analysis of Jordan's Constitution and the different branches of government, prevalent political ideologies, and civic constitutional rights. It also develops an understanding of civic values and be able to appreciate freedom of speech and engage with those who have different opinions to them. Students will also develop an understanding of civic agency such as the importance to vote, volunteering, and engaging in civic responsibility in their own communities.

		3 CH	Prereq:	None
900118	Cultural Development	3	0	

This course provides practical communication skills and investigates the connection between culture and development in Jordan and the region. As a project-based course, students work independently or in small groups, to develop a final project that not only communicates their insights and findings but also draws awareness on the topic they have chosen to tackle. The course culminates with students presenting their final projects for evaluation.

		3 CH	Prereq:	900097 or passing the placement test
900120	Arabic Communication Skills (1)	3	0	

This course enhances students' essential practical skills in Arabic reading, writing, listening, and speaking, through studying selected literary texts. Emphasis is placed on the structure of the Arabic sentence, its most common derivatives, and its most common artistic forms.

		3 CH	Prereq:	None
900122	Entrepreneurship and Innovation	3	0	

This course provides knowledge of entrepreneurship, innovation, and the creation and launch of new ventures. It examines the entrepreneur's approach to life skills necessary for that approach to create value. Students will be able to recognize and evaluate entrepreneurial opportunities..

		3 CH	Prereq:	None
900124	Human Rights	3	0	

This course provides basic knowledge of human rights, conceptual and historical foundations, international legal instruments, frameworks, and institutions aimed at advancing human rights worldwide. It also enhances communication skills dealing with current debates and issues within the field of human rights as a by-product of larger questions of cultural relativism vs. universality, collective vs. individualistic society, and their applicability on a national level.

		3 CH	Prereq:	900099 or passing the placement test
900130	English Communication Skills (1)	3	0	

This course helps students enhance their ability to communicate in English through the four basic skills – reading, writing, listening and speaking. It provides grammatical forms and structures that are used in real-life situations. Stimulating and informative passages are included to hone students' reading comprehension skills and widen their horizons. There are also writing exercises that are relevant to students' experiences.

		3 CH	Prereq:	900130
900131	English Communication Skills (2)	3	0	

This course is a continuation of English Communication Skills (1). It further enhances students' basic language skills: reading, writing, listening, and speaking. It provides essential information about grammatical forms and structures used in real communicative situations and relevant to the student's immediate life, building their fluency. Stimulating and informative passages are selected to improve student's reading comprehension ability and widen their horizons. Exercises and semi-guided paragraphs and essays are used to improve their writing skills, in addition to listening skills through audio CDs, and online practices.

		3 CH	Prereq:	900130
900133	Research Methodology	3	0	

An overview of research methodology, including understanding basic concepts used in quantitative and qualitative research methods. It enhances students' practical and thinking skills in research (quantitative and qualitative) and how to use the appropriate tools for testing, data collection, analysis, and interpretation. The course covers the following topics: research methods; using research tools, testing hypotheses, collecting and analyzing data, presenting results, and writing research manuscripts such as reports, papers, and proposals for research projects.

		3 CH	Prereq:	
900140	Appreciation of Art	3	0	

This course provides understanding conceptual basis of the visual arts, and arts terminology. Variety of styles will be introduced. It provides Knowledge of historical western and non-western cultural styles of arts in a variety of media, including architecture. Visual aspects of visual art will also be emphasized.

		3 CH	Prereq:	
900141	Appreciation of Music	3	0	

This course acquaints students in understanding the elements of music and the primary musical periods of traditional Western European classical music. It introduces essential knowledge and a brief overview of the major composers and their music through class lectures, listening to musical examples in class, reading the text, listening to musical examples provided on the student CD's or recordings, actively engaging in group discussions, attending live concerts of suggested performances, and completing research papers and/or oral presentations pertinent to the course material.

		3 CH	Prereq:	None
900171	Science & Society	3	0	

This course provides knowledge of the essential facts and the philosophy in advances of science and technology and their impact on society and social behavior. It analyzes social dimensions of recent advances in areas such as nutraceuticals, recreational drugs, and radiation. Emphasis on group discussions, practical communications skills, and team work are encouraged.

		3 CH	Prereq:	None
900172	Development and Environment	3	0	

This course provides environmental knowledge of the climate change and covers the natural renewable and non-renewable cycles of energy available on earth. Historical energy use and conventional energy resources are presented, along with associated environmental problems such as air pollution and mining and environmental impacts such as global warming and ozone depletion.

3 CH	Prereq:	900096 or passing the placement test
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900180	Computer Skills	2	2
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This course introduces general knowledge and critically analyzes the internet, new media, and digital technologies and the roles they play in contemporary society, culture, business, arts, and everyday life. It enhances students' computer skills in exploring the interface between emerging new media technologies and cultural practices involving information, communication, knowledge, identities and power and build a rich understanding of how new technologies are generated, circulated, and consumed.

3 CH	Prereq:	None
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900185	Astronomy	3	0
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This course provides quantitative and qualitative essential knowledge of the nature of planetary systems, in particular our solar system, as well as the nature of the stars, the interstellar medium, the galaxies, and the universe, as determined from a variety of astronomical observations and practical real-life models.

3 CH	Prereq:	None
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900190	Digital Culture	3	0
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This course introduces general knowledge and critically analyzes the internet, new media, and digital technologies and the roles they play in contemporary society, culture, business, arts, and everyday life. It enhances students' computer skills in exploring the interface between emerging new media technologies and cultural practices involving information, communication, knowledge, identities and power and build a rich understanding of how new technologies are generated, circulated and consumed.

1 CH	Prereq:	900101
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900201	Sports (2)	1	3
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This course provides general knowledge in fitness methodologies within students' lifestyles in order to maintain healthy life style. This course also addresses basic concepts in racket sports such as (tennis, Badminton, table tennis & Squash).

1 CH	Prereq:	900110
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900210	Cultural Development (2)	1	2
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This course enhances students' practical oral, written and communication skills in both cultural contents which extends beyond students' classroom into their local communities through presentations and discussion papers in class, and an introduction to speech communication which emphasizes the practical skill of public speaking, including techniques to reduce speaker anxiety, and the use of visual aids to enhance speaker presentations. It prepares students' to succeed in typical public speaking situations and to provide them with the basic principles of organization and skills needed for effective speeches.

1 CH	Prereq:	900210
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900211	Cultural Development (3)	1	2
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This course provides further practical communication skills and takes a different angle on the concept of cultural development and focuses on student personal development. Specifically, it tackles the practical challenge of finding a job/career that best fits students' professional interests and talents as well as their personal goals and preferences. Each student will write his/her very own 'dream job description' – capturing both professional aspirations as well as a realistic medium-to-long-term roadmap for the future. Furthermore, each student will also develop a CV, which can be used in the his/her term to get a job that will hopefully get them closer to reaching her/his goals.

3 CH	Prereq:	Concurrent 0902107
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902101	General Chemistry (1)
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3	0
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This course provides essential concepts and practical skills in the following topics: measurements and significant figures; atoms; ionic compounds; molecules and nomenclatures; moles; chemical reactions and the mole concept; reactions in aqueous solutions; the properties of gases and the gas laws; energy in chemical reactions; quantum mechanics; the periodic table and some properties of the elements; chemical bonding and the structure of molecules.

1 CH	Prereq:	Concurrent 0902101
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902107	General Chemistry lab (1)
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0	3
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This course introduces various technical skills and protocols in lab safety and equipment. Density, empirical and molecular formula of compounds, limiting reactants, molar mass of volatile liquid, periodic table and periodic law, alum synthesis, volumetric analysis and vinegar analysis, bleach analysis, and anions and cations chemical tests.

3 CH	Prereq:	0902101
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902111	Organic Chemistry for Health Sciences
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3	0
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This covers the fundamental knowledge of the principles of organic chemistry. The course introduces the different classes and functional groups in organic chemistry and the correlation with their relative reactivity; it provides practical skills in the synthesis methods and understanding the reactions of each functional group. It introduces practical skills in the mechanisms of different types of reactions.

1 CH	Prereq:	Concurrent 0902111
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902117	Organic Chemistry Lab for Health Sciences
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0	3
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This various technical skills and protocols used in organic chemistry labs. This course describes different purification methods, mixture separation techniques, and how to measure the different physical properties of samples. It also includes new procedures to perform reactions and the different methods to isolate the product. The reactions are closely chosen to reflect and resonate with the co-current organic chemistry course.

3 CH	Prereq:	None
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903101	Calculus (1)
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3	0
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This course covers the essential knowledge and practical analytical skills in functions, algebraic and transcendental, graphs and the effects of translations and scaling, limits(with intuitive approach) and continuity, the derivative various meanings, main rules and applications, approximation and graph sketching, definite and indefinite integration, the substitution rule and the fundamental theorem of calculus.

3 CH	Prereq:	903101
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903102	Calculus (2)
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3	0
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This course covers the essential knowledge and practical skills in integration techniques, infinite series, infinite sequences, and practical applications in volumes, areas, arc lengths, and polar coordinates. It develops intellectual and independent creativity in key techniques to practical examples and promotes critical thinking skills in new fields of applications.

		3 CH	Prereq:	None
903103	Mathematics for Business	3	0	

This course introduces students to practical analytical skills in variety of mathematical concepts that can be used in the context of business and commercial enterprises to record and manage enterprise data and operations. The course covers the topics of linear equations, quadratic equations, matrices and their wider applications in business, as well as differentiation.

		3 CH	Prereq:	903103
903182	Statistics for Business	3	0	

This course introduces students to the fundamental knowledge of descriptive statistics and its wider application in business and the decision-making process. It also provides practical skills of tools and methods for effective use of data in problem solving and decision making. It emphasizes data management and proper ways to communicate effectively in an executive manner. Topics covered are probability, decision analysis, continuous distributions, hypothesis testing, ANOVA, correlation and simple linear regression. Exercises and examples are drawn from marketing, finance, and operations management.

		3 CH	Prereq:	903102
903201	Applied Math for Engineering (1)	3	0	

This course provides general knowledge and practical analytical skills in ordinary differential equations, linear differential equations of second and higher order, systems of differential equations, phase plane, stability, series solutions of differential equations, orthogonal functions, Laplace transforms, and linear systems of equations, matrices and determinants.

		2 CH	Prereq:	None
903231	Statistics for Health Sciences	2	0	

The course provides conceptual essential understanding and practical application skills in biostatistics, statistical studies, graphical presentation of data, measures of central tendency, spread (dispersion), probability concepts, distributions, hypotheses testing, and sampling methods.

		3 CH	Prereq:	None
903281	Probability and Statistics	3	0	

The course provides understanding of the basic concepts in descriptive statistics and covers basic concepts and application of probability, discrete and continuous random variables, probability distributions, expected values, sampling distributions, point estimation, confidence intervals, hypothesis testing and simple linear regression models.

		3 CH	Prereq:	903102
903381	Numerical Analysis	3	0	

This is an overview course of basic skills in various numerical methods using both manual and Excel means to determine approximating method errors, finding roots for nonlinear equations, interpolation and approximation of functions, numerical differentiation, numerical integration, and an introduction to optimization methods.

			3 CH	Prereq:	None
904101	General Physics (1)	3	0		

This is an introductory calculus-based physics course, which serves students majoring in engineering, or the physical sciences. It provides general knowledge, and critical and interpersonal skills, in vectors, motion in one dimension, motion in two dimensions, Newton's laws, work and energy, conservation of angular momentum, collisions, rotational motion, and equilibrium.

			3 CH	Prereq:	904101
904102	General Physics (2)	3	0		

This course is a continuation of General Physics (1) (0904101). It provides general knowledge and analytical skills in electricity, electric charge, force, field, potential, Gauss's law, electromotive force, capacitors, direct current circuits, magnetism, magnetic fields, Ampere's law and Faraday's law, inductance, and AC circuits.

			3 CH	Prereq:	None
904103	Physics for Health Sciences	3	0		

This algebra based course. It provides general knowledge and analytical skills in topics such as measurements, laws of motion and acceleration, work and energy, heat and laws of gases, thermodynamics, fluids, electric forces, fields and potentials, direct currents, nerve conduction, sound, lenses, light, structure of matter, x-rays, and nuclear physics.

			1 CH	Prereq:	Prerequisite/ Requisite: 904101
904107	General Physics Lab. (1)	0	3		

This course provides hand on practical, critical, and analytical skills in topics covered by general physics (1). It introduces and applies the concept of experimental simulations. It covers topics in vector addition, velocity and acceleration, gravity and free falling objects, Newton's second Law, frictional forces, collisions and Hooke's law. The course is based on quantitative descriptive analysis in different situations and demands oral communication between group members and written skills in the form of a lab report.

			1 CH	Prereq:	Prerequisite / Requisite 904012
904108	General Physics Lab. (2)	0	3		

It includes experiments on topics covered by General Physics (2). It introduces and applies the concept of experimental simulations. It covers topics in electricity and magnetism; Charging methods and charge distribution, electric field lines mapping, simple circuits, RC circuits, Kirchhoff's Rules, Earth's magnetic field, induction and Faraday's Law, and the application of induction in transformers.