## EASTERN MEDITERRANEAN UNIVERSITY COURSE OUTLINE TEMPLATE

OURSE CODE         MATHY?         COURSE LEVEL         Undergraduate SPRING 2014-2015           COURSE TYPE         Invested Analysis for Engineers         Invested Analysis for Engineers           COURSE TYPE         Invested Analysis for Engineers         Invested Analysis for Engineers           COURSE TYPE         Invested Analysis for Engineers         Invested Analysis for Engineers           CORECURSTES         MATHY?         Invested Analysis for Engineers           UDRATION OF COURSE         One sensater         Invested Analysis for Engineers           UDRATION OF COURSE         One sensater         Invested Analysis for Engineers           UDRATION OF COURSE         One sensater         Invested Analysis for Engineers           UDRATION OF COURSE         One sensater         Invested Analysis for Engineers           UDRATION OF COURSE         One sensater         Invested Analysis for Engineers           UDRATION OF COURSE         One sensater         Invested Analysis for Engineers           UDRATION OF COURSE         One sensater         Invested Analysis for Engineers           UDRATION OF COURSE         One completion of this module, school on solving module and a could be appletion of analysis for Engineers         Invested Analysis for Engineers           On completion of this module, school on solving module and a could be appletion of analysis for Engineers         Invested Analysis for Engi		
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LECTURENES         Or. 1 Asst. Prof. Dr. Medimest Board metures board demusedue: res. 1100 office AS373           OPEDIT VALUE         Dr. 2 Abst. Org. C dr. 9 for Max 100 of Control 100 of Control 100 office AS373           OPEDIT VALUE         Dr. 2 Abst. Org. C dr. 9 for Max 100 of Control 100 office AS373           OPEDIT CONTES         Does sensester           DURATION OF COURSE         Does sensester           DURATION OF COURSE         Does sensester           CANLAGUE DE Segmenton         Constant of Course Sensester           CENERAL LEARNING OUTCOMES (COMPETENCES)         Concompletion of this module; sudden should be and course;           - Instrumentaria de Sense Sen		
OPERPTALUE         0.13         ECTS VALUE         6           PREREQUISTES         IAITEGO or MATTEGO         FORMATION           CORECOLSTES         One sensite         CORECOLSTES         CORECOLSTES           DURATION OF COURSE         One sensite         With CORECOLSTES         CorecolsTES           MORECOLSTES         One sensite         With CORECOLSTES         CorecolsTES           MAR & OBECTIVES         International differentiation and infegration.         Curve times, international operations in a broad range of municical methods for whying mathematical problems that arise in computational science.           PRIME & CORECUTVES         Content on broad range of municical methods for whying mathematical problems that arise in computational science.           CENTRAL LEAK MING OUTCOMENT (CONS)         On completion of this module, student should be able to:         • write bask Multib programs to solve the problems encountered in the course;           • write bask Multib programs to solve the problems encountered in the course;         • how the difference bases countered in the course;         • solve simultaneously encountered the sequence of a countered in the course;           • a state mathematical webside of problems encountered in the course;         • solve simultaneously sets of finance appartment and an exact solution of a requiration;           • solve simultaneously sets of finance appartment and an exact solution in the course;         • solve simultaneously sets of finance appartmetequartions using: Gauss		
PREFERENCIPSITES         MATHEMP           CORREQUISITES         On semaster           DURATION OF COURSE         On semaster           CATALOGUE DE SERVITION         Consequence           This score is an introduction to a broad range of numerical methods for solving mathematical problems that arise in compatitional science, engineering and mathematics. The public department the result of the construction of this module as studies stoud be and the course;           • Row Met Edifference between an approximate and an exact solution of a problem, and the difference between an approximate and an exact solution of an equation;           • determine the order of an incardue process for comparing the root of an equation;           • solve mathematical problems and science station relation;           • construct an interpoleting relation work for Gold and Net Mot Sol (and Net Mot Sol (and Net Method);           • construct an interpoleting relation work for Gold and Net Mot Sol (and Net Method);           • solve		
CORE CONSTES         One semister           UPRATION OF COURSE         One semister           WEB LINK         Intervention           CATALOUTE DESCRIPTION         Intervention           Numerical energy, Statistical problems signations. Convergence, Solution of linear systems of equations: direct and iterative methods, so that problems that arake in comparisonal solution. Curve is an introduction to a broad mage of numerical methods for solving mathematical problems that arake in comparisonal solution. Curve is an introduction to a broad broad problems and are bet to interpret the results. To achieve this goal, you will be required to use MATLAB to (CHNERA II. IARNING OUTCOMENTS) (CONNETTION CONSTITUENT).           • with built Multip Strength (CHNERA)         • AND to built for MULTIP (CHNERA)           • with built in Multip Strength (CHNERA)         • AND to built for MULTIP (CHNERA)           • with built in Multip Strength (CHNERA)         • AND to built for MULTIP (CHNERA)           • with built in Multip Strength (CHNERA)         • AND to built for MULTIP (CHNERA)           • with outlinear stype cases of comparison in and are cased Studien of a equation.         • AND to built for AND to any and the AND to any AND to A		
DURATION OF ECURSE         One semiser           CATALOGUE DESCRIPTION         Interpolation Lonvergence. Solution of linear systems of equations: direct and iterative methods. Interpolation. Curve minime Nummor Sufference is an introduction to a broad mage of numerical methods for solving mathematical problems that ratic in comparison to solve the problems of an alto for solving mathematical problems that ratic in comparison to solve MATLAB to choose a programme technique to any MATLAB to the choose and problem technique the result. To achieve this gual, you with the required to use MATLAB to choose MATLAB to the choose and problem technique the result. To achieve this gual, you with the required to use MATLAB to the choose of this module, solution solution the abole to:           CHNIERAL LEARNING COUNTENE (COMPETENCIS)           Choose and the choose and problem technique to a court solution of a problem, and the definition of abolite and relative errors;           - know the difference befores and approximation and a court solution of an eprokem, and the course;           - know the difference befores compliance qualiton using the bisection method , Regula Falsi method, fixed point iteration method, Newton's method and the Scenari method;           - determine the rord(s) of a nonlinear equation using the bise contracter solution of an equation:           - solve solutions using the determine the Lagrange on Newton formula, and describ their relative advantages and disadvantages; environ formula, and describ their relative advantages and disadvantages; environ formula, and describ their relative advantages and disadvantages; environ formula, and describ their relative advantages and disadvantages; environ formula and their relative properenting and analysis used for manorelad method. <td></td> <td></td>		
CATALOUE DESCRIPTION Numerical arControl of the provide evolution of the set systems of equations: direct and iterative methods. Interpolation. Curve fring Monoration differentiation and integration. AND 3 The concers is an introduction to a broad range of numerical methods for solving mathematical problems that arise in computational science. regineering and mathematics. The goal of this counce is to provide you with an understanding of some basic numerical methods so that you are able to choose appropriate techniques and to study their properties. GENERAL LEARNING OUTCOMES (COMPETENCES) On completion of this module, student should be able too: • write basic Multah programs to solve the probabiems encountered in the course; • know the difference between an upproximate and an exact solution of a problem, and the definition of absolte and relative errors; • determine the order of an iterative process for computing the root of an equation: • state and prove the conditions under which the sequence $X_{n+1} \equiv g(X_n)$ converges to a unique root of the equation $x_n g(x)$ ; • determine the order of an iterative process for computing the root of an equation: • state and prove the conditions under which the sequence $X_{n+1} \equiv g(X_n)$ converges to a unique root of the equation $x_n g(x)$ ; • determine the order of an iterative process for computing the root of an equation: • solve the root induce approachement conditions and a Newton's methods; • construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantages; • prove the error formula for graves interpolation; • construct divided differentiation problems using Rule 's Hearmage or Newton formulas; • derive the trapezoidal and Simpson' rule; • solve Ordinary Differential Equation problems using Rule's Hearmage or Newton formulas; • derive the trapezoidal and Simpson' rule; • solve Ordinary Differential Equation problems using Rule's, Hearn's and Hearge Rule and advantages o		One semester
Numerical error. Solution of nonlinear equations. Convergence. Solution of linear systems of equations: direct and iterative methods. Interpolation. Curve fitting, Numerical addressite integration. ATMS & OSJECTIVES Tegeneric and mathematics. The goal of this integration is the problem that arise in comparison backerse. Tegeneric and mathematics. The goal of this income is to provide you with an oddestatuming of wom backerse integration of the product is the properties. On completion of this module, student should be able to: • write basic Matlab programs to save the problems and are acts obtained or a problem, and the definition of absolute and relative errors; • determine ther ord(s) of a nonlinear equation sing the Bisection method , Regula Falsi method , fixed point iteration method , Newton's method and the Sceant method; • state and prove the conditions suggest which the sequence $x_{\mu+1} \equiv g(x_{\mu})$ converges to a unique root of the equation $x_{2}$ (s); • determine the ord(s) of a equation using the Bisection method , Regula Falsi method , fixed point iteration method , Newton's method and the Sceant method; • solve nomlinear systems of equations using (the Bisection method , Regula Falsi method , fixed point iteration sceg(s); • determine the ord(s) of a interative process for computing the root of an equation; • solve nomlinear systems of equations using (the Bisection method , Regula Falsi method , Gauss-Sieded and the SOR methods) • construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantage; • prove the error form the fungeropatical. • derive the error form the fungeropatical and Simpson' rules; • advent the interpolating polynomial using either the Lagrange on Newton formula, and describe the relative advantages and disadvantages • using the transport of this course, all students will have developed their appreciation of and respect for values and attifues regarding the issues of: • The nick of muni	WEB LINK	
choose appropriate techniques for solving problems and ar able to interpret the results. To achieve this goal, you will be required to use MATLAB to independent numerical techniques and a study their properties. CENERAL LEARNING OUTCOMES (COMPETENCES) On completion of this module, student should be able to: <ul> <li>write basic Mathab programs to solve the problems encountered in the course;</li> <li>know the difference between an approximate and an exact solution of a problem, and the difficition of abolate and relative errors;</li> <li>determine the roots of a nonlinear equation using the Bisection method, Regula Fabi method, fixed point iteration method, Newton's method and the Securit method;</li> <li>state and prove the conditions under which the sequence x<sub>n+1</sub> = g(x<sub>n</sub>) converges to a unique root of the equation x=g(x);</li> <li>determine the order of an iterative process for computing the root of an equation;</li> <li>solve simultane systems of requadors using face uptor and vervolves' methods;</li> <li>construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantages;</li> <li>prove the error formula for lagrange interpolation;</li> <li>construct divided difference tables for prescribed data;</li> <li>solve numerical differentiation problems using studub numerical differentiation formulas;</li> <li>derive the trapezoidal and Simpson' rules;</li> <li>solve completion of this course, all students will have developed their skills in:</li> <li>the mathematical analysis underlying the development of numerical methods.</li> </ul> On successful completion of this course, all students will have developed their skills in: <ul> <li>the mathematical analysis underlying the development of numerical methods.</li> <li>being the origon course, all students will have developed their appreciation of an expect for values and attitudes regarding the issues of:</li> <li>the obtained in the numerical differentiation of the</li></ul>	Numerical error. Solution of fitting. Numerical differentia AIMS & OBJECTIVES	of nonlinear equations. Convergence. Solution of linear systems of equations: direct and iterative methods. Interpolation. Curve ation and integration.
On completion of this module, student should be able to:         • write base Mathab programs to solve the proheme econtered in the coarse;         • how the difference between an approximate and an exact solution of a problem, and the definition of abonite and relative errors:         • determine the order of an iterative process for computing the Dissection method, Regula Falsi method, fixed point iteration method, Newton's method and the Secant method:         • state and prove the conditions using the dissection method.         • solve andimetar system of equations using for point and Newton's methods:         • solve andimetar system of equations using for point and Newton's methods:         • construct an Interpolating polynomial using the first Lagrange or Newton formula, and describe their relative advantages: errors the error formula for Lagrange interpolating:         • construct divide difference tables or pose-first data:         • solve numerical differentiation problems using suitable numerical differentiation formulas;         • derive the error term for the trapcoidal and Simpson' rules;         • owle ordinary Differential Equation problems using Euler's, Hean's and Runge Kutta methods         On successful completion of this course, all students will have developed their skills in:         • the mathematical analysis underlying the divelopment of numerical methods.         On successful completion of the course will dive diveloped their appreciation of and respect for values and attitudes regarding the issues of:         • theinglenementing and systs underlying the divelopment of	choose appropria implement nume	the techniques for solving problems and are able to interpret the results. To achieve this goal, you will be required to use MATLAB to rical techniques and to study their properties.
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<ul> <li>know the difference before an approximate and an exact solution of a problem, and the definition of absolute and relative errors:</li> <li>determine the root(s) of a nonlinear equation using the Biscetion method, Regula Falsi method, fixed point iteration method, Newton's method and the Secant method;</li> <li>state and prove the conditions under which the sequence X<sub>p+1</sub> = g(X<sub>p</sub>) converges to a unique root of the equation x=g(x);</li> <li>determine the order of an iterative process for computing the root of an equation;</li> <li>solve simultaneously sets of linear algebraic equations using Gauss Elimination, LU Decomposition, Jacobi , Gauss-Siedel and the SOR methods;</li> <li>construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantage;</li> <li>prove the error formal for Lagrange interpolation;</li> <li>construct divided difference tables for prescribed data;</li> <li>solve nomerical differentiation problems using Subble numerical differentiation formulas;</li> <li>derive the rarpezoidal and Simpson's rules;</li> <li>walve Ordinary Differential Equation problems using Euler's, Hean's and Runge Kutta methods.</li> <li>On successful completion of this course, all students will have developed their skills in:</li> <li>the mathematican analysis underlying the development of numerical methods.</li> <li>Being able to stablish the limitations, advantages, and dischantages of numerical methods.</li> <li>Being able to stablish the limitations, advantages, and descripting a paletation of and respect for values and attitudes regarding the issues of:</li> <li>The inducementation of the accurate, advantages of numerical methods.</li> <li>Being able to stablish the limitations, advantages, and dischantages of numerical methods.</li> <li>Being able to stablish the limitations, subantage to a valve of palatidiaciophinary applications.</li> <li>Relationally prive</li></ul>	1	
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• state and prove the conditions under which the sequence $x_{n+1} = g(x_n)$ converges to a unique root of the equation $x_{29}(x)$ ; • determine the order of an iterative process for computing the root of an equation; • solve simultaneously sets of linear algebraic equations using Gauss Elimination, LU Decomposition, Jacobi , Gauss-Siedel and the SOR methods; • construct an interpolating polynomial using effer the Lagrange or Newton formula, and describe their relative advantages and disadvantages; • prove the error formula for Lagrange interpolation; • construct divided difference tables for prescribed data; • orstruct divided difference tables for prescribed data; • other the trapezoidal and Simpson's rules for approximating an integral; • derive the trapezoidal and Simpson's rules for approximating an integral; • derive the error term for the trapezoidal and Simpson' rules; • solve Ordinary Differential Equation problems using Euler's, Heun's and Runge Kutta methods On successful completion of this course, all students will have developed their skills in: • the mathematical analysis underlying the development of numerical methods • the implementation of the numerical methods for a variety of multidiselpilary applications • breads the coursible finations, advanues, and deadvanues; • advector the consense engineering • Relationshap with other methes engineering • Relationshap with other enderstanding of the concepts and the principles as demonstrated by correct and accurate knowledge and application of theory/laws in solving problems, seponse to problems is call, legible, concise and accurate knowledge and application of theory/laws in solving problems, helps and encourstead by correct and accurate knowledge and application of theory/laws in solving problems, helps and encourstead by the order thanders anglung of the concepts and the principles as demonstr	determine the ro	ot(s) of a nonlinear equation using the Bisection method, Regula Falsi method, fixed point iteration method, Newton's
<ul> <li>elernine the order of an iterative process for computing the root of an equation;</li> <li>elernine of the order of an iterative process for computing the root of an equation;</li> <li>Subve simultaneously sets of linear algebraic equations using Gauss Elimination, LU Decomposition, Jacobi , Gauss-Siedel and the SOR methods;</li> <li>construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantages;</li> <li>prove the error formula for Lagrange interpolation;</li> <li>construct an interpolating polynomial using situable namerical differentiation formulas;</li> <li>elerve the trapezoidal and Simpson's rules for approximating an integral;</li> <li>derive the trapezoidal and Simpson' rules;</li> <li>solve Ordinary Differential Equation problems using Euler's, Heun's and Range Kutta methods</li> </ul> On successful completion of this course, all students will have developed their skills in: <ul> <li>the mathematical analysis underlying the development of numerical methods</li> <li>the implementation of the numerical methods for a variey of multidiseplinary applicators.</li> <li>being able to establish the limitations, advanages, and disadvanages of numerical methods</li> <li>The role of numerical methods for a variey of multidiseplinary applicators.</li> <li>The role of numerical methods in enginering</li> </ul> <b>RADING CRITERIA</b> <ul> <li>A 585-100 A - 390-84</li> <li>Excellent understanding of the concepts and the principles as demonstrated by correct and accurate knowledge and application of theorylaws in solving problems, Response to problems is clear, legible, concise and accurate. Knowledge and application of theorylaws in solving problems, but doesn'th away any depth. Response to problems is clear, legible, but constanted by correct and accurate knowledge and application of theorylaws in solving problems, but doesn'th away any depth. Response to probl</li></ul>		
<ul> <li>solve nonlinear systems of equations using fixed point and Newton's methods;</li> <li>Solve simultaneously sets of linear algebraic equations using Gauss Elimination, LU Decomposition, Jacobi , Gauss-Siedel and the SOR methods;</li> <li>construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantages;</li> <li>prove the error formula for Lagrange interpolation;</li> <li>construct divided difference tables for prescribed data;</li> <li>solve numerical difference tables for prescribed data;</li> <li>derive the error term for the trapezoidal and Simpson's rules;</li> <li>derive the error term for the trapezoidal and Simpson rules;</li> <li>derive the error term for the trapezoidal and Simpson rules;</li> <li>solve Ordinary Differential Equation problems using Euler's, Heun's and Runge Kutta methods</li> <li>On successful completion of this course, all students will have developed their skills in:</li> <li>the mathematical analysis underlying the development of numerical methods.</li> <li>the insumerical windo for a vatery of multifocinplurar papitonion:</li> <li>being able to establish the limitations, advantages of numerical methods.</li> <li>The ode of numerical methods in calation to engenring.</li> <li>Realmosthy with other methors angenoening.</li> <li>GRADMC CRITERIA</li> <li>A. AS5-100 , A-30-84</li> <li>Excellent understanding of the concepts and the principles as demonstrated by correct and accurate knowledge and application of theorylaws in solving problems, Response to problems is clear, legible, concise and accurate knowledge and application of theorylaws in solving problems, but doesn'th war any depth. Response to problems is clear, legible, concise and accurate knowledge and application of theorylaws in solving problems, but doesn'th war any depth. Response to problems is clear, legible, and coratins inaccurate. Knowledge and application of th</li></ul>		
<ul> <li>Solve simultaneously sets of linear algebraic equations using Gauss Elimination, LU Decomposition, Jacobi , Gauss-Siedel and the SOR methods:         <ul> <li>construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantages;</li> <li>prove the error formula for Lagrange interpolation;</li> <li>construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantages;</li> <li>error the trapezoidal and Simpson "rules;</li> <li>derive the error form for the trapezoidal and Simpson "rules;</li> <li>edrive the error term for the trapezoidal and Simpson "rules;</li> <li>edrive the error term for the trapezoidal and Simpson "rules;</li> <li>edrive the error term for the trapezoidal and simpson "rules;</li> <li>edrive the error term for the trapezoidal and simpson "rules;</li> <li>edrive the error term for the trapezoidal and simpson "rules;</li> <li>edrive the error term for the trapezoidal and simpson "rules;</li> <li>edrive the error term for the trapezoidal and simpson "rules;</li> <li>edrive the error term for the trapezoidal and simpson "rules;</li> <li>edrive the error term for the momerical methods for a varety of multidisciptionary application.</li> <li>being able to stalish the limitations, advantages, and disadvantages of municical methods.</li> </ul> </li> <li>On successful completion of this course, all students will have developed their appreciation of and respect for values and attitudes regarding the issues of:             <ul> <li>The role of numerical methods in relation to engineering.</li> <li>Relationship with other members engineering</li> </ul> </li> <li><b>Construes in a Strue of Strue error strue engineering</b></li></ul>		
methods;       • construct an interpolating polynomial using either the Lagrange or Newton formula, and describe their relative advantages and disadvantages;         • prove the error formula for Lagrange interpolation;       • construct divided difference tables for prescribed data;         • solve numerical difference tables for prescribed data;       • derive the trapezoidal and Simpson's rules; for approximating an integral;         • derive the error term for the trapezoidal and Simpson's rules;       • solve Ordinary Differential Equation problems using Euler's, Hean's and Range Kutta methods         On successful completion of this course, all students will have developed their skills in:       •         • the mathematical analysis underlying the developed their appreciation of and respect for values and attitudes regarding the issues of:       •         • The role of numerical methods for a varier of mumicical methods       •         • the implementation of the numerical methods for a varier of multidisciplinary applications       •         • the implementation of this course, all students will have developed their appreciation of and respect for values and attitudes regarding the issues of:       •         • The role of numerical methods in relation to enginering       •       •         • developed their appreciation of the concepts and the principles as demonstrated by correct and accurate knowledge and application of theory/laws in solving problems, bit closes thave the depth and ouschanding quality of an 'A''. Response to problems is clear, legible, concise and accurate knowledge and application of theory/laws in sol		
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D       D+:53-55, D:50-52         (barely sufficient)       D+:correct application of theory/laws in solving problems. Response to problems is not very clear and is barely legible, and contains many inaccuracies. It reveals a minimum (confused) understanding of the material, and lacks depth in understanding and approach/application. Content and form do not adequately meet the basic expectations, and/or display significant errors. Performance demonstrates severe problems in one or more areas.         D-(fail)       35-49         Unsatisfactory progress in understanding of the concept and principles, unsatisfactory knowledge of the theoretical part of and insufficient skils in solving problems.         F       (fail)         Work does not meet the most minimal standards. It reveals no understanding of the material, lack of basic academic skills and knowledge, or completely incomprehensible writing. Performance is not acceptable		
D       D+:53-55, D:50-52         (barely sufficient)       Minimal knowledge and barely sufficient understanding of the concepts and the principles as demonstrated by approximately correct application of theory/laws in solving problems. Response to problems is not very clear and is barely legible, and contains many inaccuracies. It reveals a minimum (confused) understanding of the material, and lacks depth in understanding and approach/application. Content and form do not adequately meet the basic expectations, and/or display significant errors. Performance demonstrates severe problems in one or more areas.         D-       (fail)         Unsatisfactory progress in understanding of the concept and principles, unsatisfactory knowledge of the theoretical part of and insufficient skils in solving problems.         F       (fail)         Work does not meet the most minimal standards. It reveals no understanding of the material, lack of basic academic skills and knowledge, or completely incomprehensible writing. Performance is not acceptable		
(barely sufficient)Minimal knowledge and barely sufficient understanding of the concepts and the principles as demonstrated by approximately correct application of theory/laws in solving problems. Response to problems is not very clear and is barely legible, and contains many inaccuracies. It reveals a minimum (confused) understanding of the material, and lacks depth in understanding and approach/application. Content and form do not adequately meet the basic expectations, and/or display significant errors. Performance demonstrates severe problems in one or more areas.D- (fail)35-49 Unsatisfactory progress in understanding of the concept and principles, unsatisfactory knowledge of the theoretical part of and insufficient skils in solving problems.F (fail)Work does not meet the most minimal standards. It reveals no understanding of the material, lack of basic academic skills and knowledge, or completely incomprehensible writing. Performance is not acceptable	D	
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NG May be given the students not attending classes and or examinations	(1811)	
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	raws lots of concepts and t TEACHING METHOD	
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		student identification card, in order to be able to attend examinations or
qu	izzes. Those who will not amination.	t be able to show identification card will not be allowed to attend the
		to attend the examinations in the scheduled room. They will not be allowed in a room which is not scheduled for them.
		examination papers within a pre-announced period of time. Information
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		nination has to provide a valid excuse within three days following the
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WEEK	SCHEDULE	TOPICS
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WEEK	SCHEDULE DATE	
<b>WEEK</b> 1	& SCHEDULE DATE Mar. 9-13	Roots of Equations,Locating the roots graphically and analytically
WEEK           1           2	& SCHEDULE DATE Mar. 9-13 Mar. 16-20	Bisection Method, False Position Method, Fixed Point Iterative Method
WEEK           1           2           3	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods
WEEK           1           2           3           4	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.
WEEK           1           2           3           4           5	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)
WEEK           1           2           3           4           5           6	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials         Midterm Examinations
WEEK           1           2           3           4           5           6           7	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17           Apr.20 -23	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials
WEEK           1           2           3           4           5           6           7           7-8-9	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17           Apr.20 -23           Apr.24 – May 06	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials         Midterm Examinations
WEEK           1           2           3           4           5           6           7           7-8-9           9	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17           Apr.20 -23           Apr.24 – May 06           May. 7-8	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials         Midterm Examinations         Least Squares, Least Squares Polynomial Fitting
WEEK           1           2           3           4           5           6           7           7-8-9           9           10	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17           Apr.20 -23           Apr.24 - May 06           May. 11-15	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials         Midterm Examinations         Least Squares, Least Squares Polynomial Fitting         Nonlinear Curve Fitting
WEEK           1           2           3           4           5           6           7           7-8-9           9           10           11	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17           Apr.20 -23           Apr.24 – May 06           May. 7-8           May. 11-15           May. 18-22	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials         Midterm Examinations         Least Squares, Least Squares Polynomial Fitting         Nonlinear Curve Fitting         Calculus of Finite Differences, Errors and Approximation of Derivatives
WEEK           1           2           3           4           5           6           7           7-8-9           9           10           11           12	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17           Apr.20 -23           Apr.24 - May 06           May. 7-8           May. 11-15           May. 25-29	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials         Midterm Examinations         Least Squares, Least Squares Polynomial Fitting         Nonlinear Curve Fitting         Calculus of Finite Differences, Errors and Approximation of Derivatives         Quadrature, Trapezoidal, Simpson's Formulas,         Composite Integration Formulas         Explicit Methods, Implicit Methods
WEEK           1           2           3           4           5           6           7           7-8-9           9           10           11           12           13	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17           Apr.20 -23           Apr.24 - May 06           May. 7-8           May. 11-15           May. 25-29           June 1-5	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials         Midterm Examinations         Least Squares, Least Squares Polynomial Fitting         Nonlinear Curve Fitting         Calculus of Finite Differences, Errors and Approximation of Derivatives         Quadrature, Trapezoidal, Simpson's Formulas,
WEEK           1           2           3           4           5           6           7           7-8-9           9           10           11           12           13           14	& SCHEDULE           DATE           Mar. 9-13           Mar. 16-20           Mar. 23-27           Mar 30-Apr 3           Apr.6 -10           Apr.13 -17           Apr.20 -23           Apr.24 - May 06           May. 7-8           May. 11-15           May. 25-29           June 1-5           June 8-12	Roots of Equations,Locating the roots graphically and analytically         Bisection Method, False Position Method,Fixed Point Iterative Method         Newton's Method, Order of the methods         Fixed Point Method, Newton's Method for nonlinear systems.         Iterative Methods for linear systems(Jacobi, Gauss-Seidel)         LU Decomposition Method, Cholesky Decomposition Method         Lagrange Interpolation Polynomial, Newton polynomials         Midterm Examinations         Least Squares, Least Squares Polynomial Fitting         Nonlinear Curve Fitting         Calculus of Finite Differences, Errors and Approximation of Derivatives         Quadrature, Trapezoidal, Simpson's Formulas,         Composite Integration Formulas         Explicit Methods, Implicit Methods

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