



Course Specifications

| | |
|----------------------|--|
| Course Title: | Introduction to Programming |
| Course Code: | MIS211 |
| Program: | Management Information Systems |
| Department: | Management Information Systems |
| College: | Business Administration |
| Institution: | Prince Sattam Bin Abdulaziz University |

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A. Course Identification

| | |
|--|---|
| 1. Credit hours: | 5 |
| 2. Course type | |
| a. | University <input type="checkbox"/> College <input type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/> |
| b. | Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/> |
| 3. Level/year at which this course is offered: | 8th level/third year |
| 4. Pre-requisites for this course (if any): MIS201- Management Information Systems | |
| 5. Co-requisites for this course (if any): | |

6. Mode of Instruction (mark all that apply)

| No | Mode of Instruction | Contact Hours | Percentage |
|----|-----------------------|---------------|------------|
| 1 | Traditional classroom | 60 | %100 |
| 2 | Blended | | |
| 3 | E-learning | | |
| 4 | Distance learning | | |
| 5 | Other | | |

7. Contact Hours (based on academic semester)

| No | Activity | Contact Hours |
|----|-----------------------------|---------------|
| 1 | Lecture | 48 |
| 2 | Laboratory/Studio | 12 |
| 3 | Tutorial | |
| 4 | Others (specify): Practical | |
| | Total | 60 |

B. Course Objectives and Learning Outcomes

1. Course Description

This course is an introductory course in computer programming. It teaches problem solving techniques and focuses on the concepts needed to write programs using event-driven, object-oriented methodology. It uses the C# as a programming language and visual studio as an Integrated Development Environment (IDE).

2. Course Main Objective

The main objective of the course is to teach basic programming statements and concepts and implement them using the C# programming language. At the end of the course, the student should be able to create a simple visual C# application using the visual studio IDE.

3. Course Learning Outcomes

| CLOs | | Aligned PLOs |
|------|--|-----------------|
| 1 | Knowledge and Understanding | |
| 1.1 | Define the concept of programming and list the different types of programming languages. | PLO1.1 |
| 1.2 | Recognize the need to compile, link, and convert a high-level language program to machine language. | PLO1.1 & PLO1.2 |
| 1.3 | Introduce basic programming statements and concepts including variables, data types, operators, methods, selection, iteration, and arrays. | PLO1.1 & PLO1.2 |
| 1.4 | Understand the main concepts involved in C# programming language: IDE, events, controls and properties, | PLO1.1 & PLO1.2 |
| 2 | Skills : | |
| 2.1 | Write programs in C#. | PLO2.2 & PLO2.3 |
| 2.2 | Use the Integrated Development Environment to compile and run a C# program. | PLO2.2 |
| 2.3 | Use problem-solving techniques including modular programming. | PLO2.3 & PLO2.4 |
| 3 | Values: | |
| 3.1 | Exhibit effective performance within a team environment | PLO3.1 |

C. Course Content

| No | List of Topics | Contact Hours |
|--------------|--|---------------|
| 1 | Chapter One: Introduction, Low and high level languages, Problem solving. | 8 |
| 2 | Chapter Two: Working with variables, Operators, and Expressions. | 9 |
| 3 | Chapter Three: Using Decision Statements. | 8 |
| 4 | Chapter Four: Using iteration statements. | 9 |
| 5 | Chapter Five: C# Arrays | 9 |
| 6 | Chapter Six: Witting Methods and applying scope. | 8 |
| 7 | Chapter Seven: C# Graphical User Interfaces. | 9 |
| Total | | 60 |

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

| Code | Course Learning Outcomes | Teaching Strategies | Assessment Methods |
|------|--|--|--|
| 1.0 | Knowledge and Understanding | | |
| 1.1 | Define the concept of programming and list the different types of programming languages. | <ul style="list-style-type: none"> Theoretical teaching through lectures. Practical teaching through class labs Discussion boards | <ul style="list-style-type: none"> MCQ, TF,FB questions Discussion board assignments |
| 1.2 | Recognize the need to compile, link, and convert a high-level language program to | <ul style="list-style-type: none"> Theoretical teaching through lectures. | <ul style="list-style-type: none"> Programming |

| Code | Course Learning Outcomes | Teaching Strategies | Assessment Methods |
|------------|--|--|---|
| | machine language. | <ul style="list-style-type: none"> Practical teaching through class labs | <ul style="list-style-type: none"> assignments Projects |
| 1.3 | Introduce basic programming statements and concepts including variables, data types, operators, methods, selection, iteration, and arrays. | <ul style="list-style-type: none"> Theoretical teaching through lectures. Practical teaching through class labs Discussion boards | <ul style="list-style-type: none"> MCQ, TF,FB questions Programming assignments Projects Discussion board assignments |
| 1.4 | Understand the main concepts involved in C# programming visual programming: events, controls and properties, | <ul style="list-style-type: none"> Theoretical teaching through lectures. Practical teaching through class labs | <ul style="list-style-type: none"> Programming assignments Projects |
| 2.0 | Skills | | |
| 2.1 | Write programs in C#. | <ul style="list-style-type: none"> Theoretical teaching through lectures. Practical teaching through class labs | <ul style="list-style-type: none"> Programming assignments Projects |
| 2.2 | Use the Integrated Development Environment to compile and run a C# program. | <ul style="list-style-type: none"> Practical teaching through class labs | <ul style="list-style-type: none"> Programming assignments Projects |
| 2.3 | Use problem-solving techniques including modular programming. | <ul style="list-style-type: none"> Theoretical teaching through lectures. Practical teaching through class labs | <ul style="list-style-type: none"> Programming Assignments Projects |
| 3.0 | Values | | |
| 3.1 | Exhibit effective performance within a team environment | <ul style="list-style-type: none"> Class discussions Group assignments | <ul style="list-style-type: none"> Evaluation of discussions and assignments |

2. Assessment Tasks for Students

| # | Assessment task* | Week Due | Percentage of Total Assessment Score |
|---|------------------|--|--------------------------------------|
| 1 | Midterm exam 1 | 5 th | 15% |
| 2 | Midterm exam 2 | 10 th | 15% |
| 3 | Quizzes | 4 th , 8 th , and 10 th | 10% |
| 4 | Assignments | 4 th , 7 th , and 9 th | 10% |
| 6 | Mini Projects | 11 th | 10% |
| 7 | Final Exam | | 40% |

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

4 office hours/week

2 academic advising hours/week

F. Learning Resources and Facilities

1. Learning Resources

| | |
|---------------------------------------|---|
| Required Textbooks | John Sharp, Microsoft Visual C# Step by Step, 9th Edition, Pearson June 2018, SBN-13: 978-1509307760, ISBN-10: 1509307761. |
| Essential References Materials | <ul style="list-style-type: none"> • Tony Gaddis, Starting out with Visual C#, Global Edition, 4/E, Pearson Feb 2017, ISBN-10: 1292163216 , ISBN-13: 9781292163215. • John Sharp , Microsoft Visual C# 2008 Step by Step, Microsoft press, ISBN-10: 0735624305, ISBN-13: 978-0735624306. • Paul J. Deitel, Harvey Deitel, Visual C# How to Program (6th Edition) Pearson Publication, ISBN-10: 0134601548, ISBN-13: 978-0134601540. • Benjamin Perkins , Jacob Vibe Hammer , Jon D. Reid , Beginning C# 7 Programming with Visual Studio 2017 1st Edition, ISBN-10: 1119458684, ISBN-13: 978-1119458685. |
| Electronic Materials | <ul style="list-style-type: none"> • https://www.programiz.com/csharp-programming https://www.programiz.com/csharp-programming/keywords-identifiers. • http://www.infocodify.com/csharp/overview • https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/index • https://docs.microsoft.com/en-us/dotnet/csharp • https://www.programiz.com/csharp-programming/variables-primitive-data-types • https://www.tutorialspoint.com/csharp/csharp_variables.htm |
| Other Learning Materials | Blackboard |

2. Facilities Required

| Item | Resources |
|--|---|
| Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) | A laboratory with computer hardware and software |
| Technology Resources (AV, data show, Smart Board, software, etc.) | Blackboard software, smart board |
| Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list) | Latest version of the visual studio or any other IDE that supports C# programming |

G. Course Quality Evaluation

| Evaluation Areas/Issues | Evaluators | Evaluation Methods |
|-------------------------|------------|--------------------|
|-------------------------|------------|--------------------|

| Evaluation Areas/Issues | Evaluators | Evaluation Methods |
|---|------------------------------|--------------------|
| Effectiveness of teaching and assessment | Students | Direct |
| Extent of achievement of course learning outcomes | Quality and Development unit | Indirect |
| Self-assessment | Teacher | Direct |
| Quality of learning resources | Students | Direct |

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

| | |
|---------------------|--------------------|
| Council / Committee | Department Council |
| Reference No. | 2 |
| Date | SEP 2022 |