

Data Structure Annual Report

A- Basic Information

1. Title and Code Data Structure/ CS241
2. Programme(s) on which this course is given CS, IS, IT and OR
3. Academic year / Level of programme 2nd year / 2nd Semester
4. Units/Weekly hours
- | | | | | | |
|---------|--------------------------------|--------------------|--------------------------------|-------|--------------------------------|
| Lecture | <input type="text" value="3"/> | Tutorial/Practical | <input type="text" value="3"/> | Total | <input type="text" value="6"/> |
|---------|--------------------------------|--------------------|--------------------------------|-------|--------------------------------|

5. Names of lecturers contributing to the delivery of the course

Dr. Waiel Shokey

Course coordinator: Dr. Waiel Shokey

External evaluator : Not Assigned yet

B- Statistical Information

No. of students attending the course: No. %

No. of students completing the course: No. %

Results:

Passed: No % Failed No %

Grading of successful students:

Excellent: No % Very Good: No %

Good: No % Pass: No %

C- Professional Information

1 – Course Teaching

Topics actually taught	No. of hours	Lecturer
1 Introduction and Overview	6	Dr. Waiel Shokey
2 Arrays, Record and Pointers <ul style="list-style-type: none"> • Linear Arrays • Control Structures. • Sub-algorithms. • Linear Arrays in Memory. 	6	Dr. Waiel Shokey
3. Basic Operations Done on Linear Arrays <ul style="list-style-type: none"> • Traversing Linear Arrays. • Inserting and Deleting. • Sorting • Linear Search • Binary Search 	12	Dr. Waiel Shokey
4. Multidimensional Arrays <ul style="list-style-type: none"> • Two Dimensional (2D) Arrays. • Representation 2D Arrays in Memory. • Pointer Arrays. • Record Structures. • Parallel Arrays. 	6	Dr. Waiel Shokey
5. Stacks and Queues <ul style="list-style-type: none"> • Stacks. • Array Representation of Stacks. • The Stack Abstract Data Type. • Queues and Priority Queues. • Array Representation of Priority Queues. • The Queue Abstract Data Type. • Multiple Stacks and Queues 	12	Dr. Waiel Shokey
6. Linked Lists <ul style="list-style-type: none"> • Introduction • Linked Lists in Memory • Basic Operations on Linked Lists • Traversing A Linked List 	6	Dr. Waiel Shokey
7. Linked Lists Operation <ul style="list-style-type: none"> • Introduction • Searching A Linked List • Memory Allocation • Insertion into A Linked Lists • Deletion from A Linked Lists • Header Linked Lists 	12	Dr. Waiel Shokey

8. A Linked Lists Abstract Data Types <ul style="list-style-type: none"> • Introduction. • Pointers. • Singly Linked Lists. • Case Studies. • Doubly Linked Lists 	6	Dr. Wael Shokey
9. Mathematical Functions and Trees <ul style="list-style-type: none"> • Introduction • Performance Analysis • Complexity of Algorithms • Performance Measurement • Binary Trees • Representing Binary Trees in Memory • Traversing Binary Trees • Traversal Algorithms Using Stacks • Path Lengths • General Trees 	12	Dr. Wael Shokey
10 Trees Abstract Data Structure <ul style="list-style-type: none"> • Introduction and Terminology. • The Abstract Data Type of Binary Trees. • Binary Tree Representations. • Binary Tree Operations 	6	Dr. Wael Shokey
Total sum	84	

Topics taught as a percentage of the content specified:

>90 %
 70-90 %
 <70%

2- Teaching and Learning Methods:

Lectures:	<input checked="" type="checkbox"/>
Practical Training/ Laboratory:	<input checked="" type="checkbox"/>
Seminar/Workshop:	<input checked="" type="checkbox"/>
Class Activity:	<input checked="" type="checkbox"/>
Case Study:	<input checked="" type="checkbox"/>
Other Assignments/Homework:	<input type="checkbox"/>

3- Student Assessment:

Method of Assessment	Percentage of total
Written examination	60
Oral examination	10
Practical/laboratory work	10
Other Assignments/class work	20
Total	100 %

Members of Examination Committee: **Dr. Wael Shokey**

Role of external evaluator: External evaluator not assigned yet

4- Facilities and Teaching Materials:

Totally adequate:

Adequate to some extent:

Inadequate:

5- Administrative Constraints

- Insufficient class rooms and halls.
- Insufficient Assistant staff members.
- Insufficient hand books.

6- Student Evaluation of the course: **Response of Course Team**

Unavailable scientific background

Preparation of introductory course in object oriented

7- Comments from external evaluator(s): **Response of Course Team**

External evaluator not assigned yet.

None

8- Course Enhancement:

Progress on actions identified in the previous year's action plan:

No previous years action plan

Role of external evaluator:

External evaluator not assigned yet

9- Action Plan for Academic Year

Actions Required	Completion Date	Person Responsible
Preparation of introductory course in object oriented		Eng. Osama raouf

Course Coordinator: Prof. Nabil Abd-El-Wahid Ismail

Signature:

Date: / /