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2025

# **guideAcademic Program and Course Description**



## Academic Program Description Form

University Name: University of Maysan

College/Institute: College of Education

Scientific Department: Department of Computers

Academic or Professional Program Title: Bachelor of Education in Computers

Final Degree Title: Bachelor of Science in Computers

Academic System: Annual

Description Date: 1/2025

Signature:

Name of Academic Assistant:

Rana Sabeeh Abboud

Date:

Signature:

Name of Department Head:

L. Abbas Abdul-Hussein Haddad

Date:

2024-2025

File reviewed by the Quality Assurance and University Performance Division

Name of Director of the Quality Assurance

and University Performance Division: Sami Hattab

Date:

Signature:



Dean's approval

Assoc. Prof. Burag T. Sh. AL-Musawi  
Applied Physics.

|   |
|---|
| <b>1. Program vision</b>  |
| The department should be a distinguished academic institution in terms of its professors, students, educational curricula, and scientific research, in light of the available capabilities. The tremendous applications, uses and developments that have become a direct challenge that we must keep pace with and develop with, whether through a generation of programming teachers and designers with experience in programming languages and at a high level, or by participating in building good information systems or modifying those systems to suit our needs, as well as inventing new applications, good work and mutual understanding, generation after generation, through balanced education and adherence to the principle of public service. |

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| <b>2. Program message</b>   |
| Contributing to achieving the college's goals in education and research to serve the community in the field of information technology in general. By providing and valuing information resources, offering various knowledge, interactive tools, and scientific training, the Computer Science Department seeks to be a leader in the educational, pedagogical, academic, and research fields, in order to be able to provide society with highly qualified programmers and educational teachers who can contribute to building its various institutions. This relies on the availability of a high-level scientific and educational cadre. |

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| <b>3. Program objectives</b>  |
| <ol style="list-style-type: none"> <li>1. The graduate should have modern basic information in the field of computer science..</li> <li>2. Preparing cadres Qualified specialization in the field of computer science that meets the needs of society.</li> <li>3. Preparing and graduating a teacher capable of teaching computer science and its related development, and who is eager to complete his postgraduate studies.</li> <li>4. Working on developing and updating the department's academic plans to keep pace with advanced developments.</li> <li>5. Increase interest and encouragement in students' social science skills.</li> <li>6. Modern and appropriate technologies meet the needs of society.</li> <li>7. Contributing to community service by spreading information awareness and providing specialized scientific studies and consultations.</li> </ol> |

| 4. Program structure |            |            |                   |                            |
|----------------------|------------|------------|-------------------|----------------------------|
| comments *           | percentage | Study unit | Number of courses | Program structure          |
|                      | 9.9%       | 18         | 8                 | Institutional requirements |

|  |       |     |         |                                |
|--|-------|-----|---------|--------------------------------|
|  | 20.2% | 36  | 9       | <b>College requirements</b>    |
|  | 69.9% | 124 | 23      | <b>Department requirements</b> |
|  |       |     | nothing | <b>Summer training</b>         |
|  |       |     |         | <b>Other</b>                   |

\* Notes may include whether the course is core or optional.

| <b>5. Expected learning outcomes of the program</b>  |  |
|--|--|
| <b>knowledge</b>   |  |
| Preparing teachers to teach computer subjects in educational institutions at a high quality level  | Preparing a teaching staff                                 |
| Creating a generation that is proficient in the use and applications of computers so that they have the ability to invest  | Prepared by a scientific researcher                        |
| Through holding courses, workshops or seminars within continuing education   | Strengthening scientific cooperation                       |
| Through mastering the scientific material and scientific research methods  | Providing the opportunity to complete postgraduate studies |
| <b>Skills</b>  |  |
| The student must master basic and advanced programming skills, and acquire skills<br>Basics of the teaching profession in computer fields.   | Teaching profession skills                                 |
| Develop scientific research skills in the field of computer science, and master the required skills.<br>To manage information systems and databases with high efficiency.  | Scientific research skills                                 |
| By preserving the state's resources and sources from depletion in all areas<br>Especially with regard to the use of computers in the educational process.  | Sustainable development skills                             |
| Developing students' practical skills in the laboratory and mastering the method of educational and psychological dealing<br>Correct inside the lab.   | practical skills   |
| <b>values</b>  |  |
| In line with the principles of tolerant heavenly religions, customs and traditions, and respect for the institution<br>The institution in which he studies and the institution in which he will work in the future | Developing beneficial values and attitudes                 |

|   |   |
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| To meet current challenges and develop the educational system   | Developing the attitude towards the teaching profession |
| To limit the misuse of their responsibilities in the scientific and educational field and to promote principles Scientific and ethical foundations. | Establishing teaching principles                        |
| For the great role played by computer science applications and uses in serving society.   | Explaining the importance of science in serving society |

| Credit hours |             | Course name              | Course code | Year/Level<br>2023-2024 |
|--------------|-------------|--------------------------|-------------|-------------------------|
| practical    | theoretical |                          |             |                         |
| 2            | 2           | mathematics              | 101CsMa     | <b>First</b>            |
| 2            | 2           | logical design           | 102CsLd     | <b>First</b>            |
| 2            | 2           | Structured programming   | 103CsSp     | <b>First</b>            |
| -            | 2           | Calculator installation  | 104CsCo     | <b>First</b>            |
| -            | 2           | discontinuous structures | 109CsDs     | <b>First</b>            |
| -            | 2           | Foundations of education | 105CsBB     | <b>First</b>            |
| -            | 2           | human rights             | 110CsHR     | <b>First</b>            |

|   |   |                             |         |               |
|---|---|-----------------------------|---------|---------------|
| - | 1 | Arabic                      | 107CsAL | <b>First</b>  |
| - | 1 | English language            | 106CsEL | <b>First</b>  |
| - | 1 | psychology                  | 108CsES | <b>First</b>  |
| 2 | 2 | theoryCalculative           | 211CsCt | <b>Second</b> |
| 2 | 1 | Data structures             | 212CsDa | <b>Second</b> |
| 2 | 2 | Processors                  | 213CsMp | <b>Second</b> |
| 2 | 2 | Databases                   | 218CsSa | <b>Second</b> |
| 2 | 2 | Object-oriented programming | 219CsOo | <b>Second</b> |
| - | 2 | numerical analysis          | 220CsMm | <b>Second</b> |
| - | 2 | developmental psychology    | 217CsDP | <b>Second</b> |
| - | 2 | Research methodology        | 214CsRM | <b>Second</b> |
| - | 2 | English language            | 215CsEL | <b>Second</b> |
| - | 1 | Educational administration  | 216CsEM | <b>Second</b> |
| - | 1 | Baath regime crimes         | 222CsCB | <b>Second</b> |
| - | 1 | Language AArabic            | 223CsAL | <b>Second</b> |

| Summary of the number of theoretical and practical hours |             |                             |             |                         |
|--|-------------|-----------------------------|-------------|-------------------------|
| Credit hours   |             | Course name                 | Course code | Year/Level<br>2023-2024 |
| practical  | theoretical |                             |             |                         |
| 2  | 2           | mathematics                 | 101CsMa     | <b>First</b>            |
| 2  | 2           | logical design              | 102CsLd     | <b>First</b>            |
| 2  | 2           | Structured programming      | 103CsSp     | <b>First</b>            |
| -  | 2           | Calculator installation     | 104CsCo     | <b>First</b>            |
| -  | 2           | discontinuous structures    | 109CsDs     | <b>First</b>            |
| 2  | 2           | theoryCalculative           | 211CsCt     | <b>Second</b>           |
| 2  | 1           | Data structures             | 212CsDa     | <b>Second</b>           |
| 2  | 2           | Processors                  | 213CsMp     | <b>Second</b>           |
| 2  | 2           | Databases                   | 218CsSa     | <b>Second</b>           |
| 2  | 2           | Object-oriented programming | 219CsOo     | <b>Second</b>           |
| -  | 2           | numerical analysis          | 220CsMm     | <b>Second</b>           |
| 16   | 21          |                             |             |                         |

| Specialized study materials |             |                             |             |                         |
|-----------------------------|-------------|-----------------------------|-------------|-------------------------|
| Credit hours                |             | Course name                 | Course code | Year/Level<br>2023-2024 |
| practical                   | theoretical |                             |             |                         |
| 2                           | 2           | mathematics                 | 101CsMa     | <b>First</b>            |
| 2                           | 2           | logical design              | 102CsLd     | <b>First</b>            |
| 2                           | 2           | Structured programming      | 103CsSp     | <b>First</b>            |
| -                           | 2           | Calculator installation     | 104CsCo     | <b>First</b>            |
| -                           | 2           | discontinuous structures    | 109CsDs     | <b>First</b>            |
| 2                           | 2           | theoryCalculative           | 211CsCt     | <b>Second</b>           |
| 2                           | 1           | Data structures             | 212CsDa     | <b>Second</b>           |
| 2                           | 2           | Processors                  | 213CsMp     | <b>Second</b>           |
| 2                           | 2           | Databases                   | 218CsSa     | <b>Second</b>           |
| 2                           | 2           | Object-oriented programming | 219CsOo     | <b>Second</b>           |
| -                           | 2           | numerical analysis          | 220CsMm     | <b>Second</b>           |





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| <b>Theoretical lectures-</b><br>- Laboratory education to acquire practical skills<br><b>E-learning</b><br>Graduation project and field practice for teaching in schools |

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| <b>6. Evaluation methods</b>  |
| <ul style="list-style-type: none"> <li>• Weekly, monthly, daily and end of year exams.</li> <li>• Practical exams and reports.</li> </ul> |

|                            |                |   |  |  |  |                      |
|----------------------------|----------------|---|--|--|--|----------------------|
| <b>7. Faculty</b>          |                |   |  |  |  |                      |
| <b>Faculty members</b>     |                |   |  |  |  |                      |
| <b>Faculty preparation</b> |                | <b>Special requirements/skills (if any)</b> |  | <b>Specialization</b>                                      |  | <b>Academic rank</b> |
| <b>lecturer</b>            | <b>angel</b>   |   |  | <b>private</b>   | <b>general</b>                             |                      |
|                            | angel<br>angel |   |  | information<br>technology<br>Computer Security<br>Number 2 | Computer<br>Science<br>Computer<br>Science | teacher              |
|                            | angel<br>angel |   |  | Computer Systems<br>and Networks                           | Computer<br>Engineering                    | Assistant Professor  |

|          |                |  |  |   |  |  |
|----------|----------------|--|--|---|--|--|
| lecturer | angel<br>angel |  |  | Information<br>Technology No. 2<br>Artificial Intelligence<br>Number 2<br>Artificial intelligence<br>administrative | Computer<br>Science<br>Computer<br>Science<br>Computer<br>Science<br>law |  |
|----------|----------------|--|--|---|--|--|

|                               |
|-------------------------------|
| 8. <b>Acceptance criteria</b> |
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|---|
| Central Admission at the Ministry of Higher Education and Scientific Research |
|---|

|   |
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| 9. <b>The most important sources of information about the program</b> |
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|                            |
|----------------------------|
| Department website and web |
|----------------------------|

|                                     |
|-------------------------------------|
| 10. <b>Program Development Plan</b> |
|-------------------------------------|

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|--|
| Continuously updating the content based on modern sources from reputable universities. |
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| Program Skills Map                        |        |        |        |        |    |    |    |           |    |    |    |                        |                           |             |                      |
|---|--------|--------|--------|--------|----|----|----|-----------|----|----|----|------------------------|---------------------------|-------------|----------------------|
| Required learning outcomes of the program |        |        |        |        |    |    |    |           |    |    |    |                        |                           |             |                      |
| values                                    |        |        |        | Skills |    |    |    | knowledge |    |    |    | Essential or optional? | Course name               | Course code | Year/Level 2023-2024 |
| A4  | Part 3 | Part 2 | Part 1 | B4     | B3 | B2 | B1 | A4        | A3 | A2 | A1 |                        |                           |             |                      |
| *   |        |        |        | *      | *  |    | *  |           |    | *  | *  | essential              | logical design            |             | First                |
| *   | *      | *      |        | *      |    | *  | *  | *         | *  | *  | *  | essential              | Structured programmin g   |             |                      |
| *   | *      | *      | *      | *      |    |    | *  | *         | *  |    |    | essential              | Calculator installation   |             |                      |
| *   | *      | *      | *      | *      |    |    | *  |           | *  | *  | *  | essential              | mathematics               |             |                      |
| *   | *      | *      | *      | *      |    | *  | *  | *         | *  | *  | *  | essential              | discontinuou s structures |             |                      |
| *   | *      | *      | *      | *      | *  | *  | *  |           |    |    |    | Support                | psychology                |             |                      |
| *   | *      | *      | *      | *      | *  | *  | *  |           |    |    |    | Support                | Foundations of education  |             |                      |
| *   | *      | *      | *      | *      |    | *  | *  |           |    | *  | *  | Support                | Arabic                    |             |                      |
| *   | *      | *      | *      | *      | *  |    | *  |           | *  |    | *  | Support                | human rights              |             |                      |

|   |   |   |   |   |   |   |   |   |   |   |   |           |                             |  |        |
|---|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------------------------|--|--------|
| * |   | * |   | * |   | * | * |   |   | * | * | Support   | English language            |  |        |
| * |   |   | * | * |   |   |   | * | * |   |   | essential | Processors                  |  | Second |
| * | * | * |   | * |   | * | * | * |   | * | * | essential | numerical analysis          |  |        |
| * | * | * |   | * | * | * | * | * |   |   | * | essential | Data structures             |  |        |
| * | * |   | * | * | * |   |   | * |   | * | * | essential | Object-oriented programming |  |        |
|   | * |   | * | * | * | * | * | * |   | * | * | essential | Databases                   |  |        |
| * |   |   | * |   | * | * | * | * | * |   | * | essential | Calculative                 |  |        |
| * | * | * | * | * |   | * |   | * | * | * |   | Support   | Research methodology        |  |        |
| * |   | * | * | * |   | * | * | * |   |   | * | Support   | developmental psychology    |  |        |
| * |   | * |   | * |   | * | * |   |   | * | * | Support   | English language            |  |        |

|   |   |   |   |  |  |   |   |  |   |  |   |         |                           |  |  |
|---|---|---|---|--|--|---|---|--|---|--|---|---------|---------------------------|--|--|
| * | * | * | * |  |  | * | * |  | * |  | * | Support | Baath<br>regime<br>crimes |  |  |
|---|---|---|---|--|--|---|---|--|---|--|---|---------|---------------------------|--|--|

● Please tick the boxes corresponding to the individual learning outcomes of  
 the programme you are applying for.



**/ Curriculum for the subject / Structured Programming  
Department of Computer Science / First Stage**

|  |   |
|--|---|
| 1. Educational institution   | University of Maysan / College of Education                           |
| 2. Scientific department/center  | Department of Computer Science  |
| 3. Course name/code  | Structured programming  |
| 4. Available forms of attendance   | Actual daily attendance of students according to the lecture schedule |
| 5. Semester/year   | annual  |
| 6. Number of study hours) . (total   | 120 hours / (2 theoretical + 2 practical) per week For 30 weeks       |
| 7. Date this description . was prepared  | 2025  |
| <p>8. Course objectives</p> <ol style="list-style-type: none"> <li>1. Qualifying the student to teach this subject in middle schools.</li> <li>2. Identify the beginning of programming correctly, independently of the specificity of the programming language, while consolidating the concepts (C++), emphasizing practical practice through a deeply structured programming language.</li> <li>3. Teaching the basics of programming, the algorithm for solving a problem, and transferring it to a program in one of the programming languages as a programming language. (C++)<br/>Structured procedural language was adopted</li> <li>4. The course also aims to enable students to acquire programming skills and solve problems programmatically, as well as write applied programs that are useful in the work of various institutions.</li> </ol> |   |
| <p>9. Course outcomes and teaching, learning and evaluation methods</p> <p>A- Cognitive objectives</p> <ol style="list-style-type: none"> <li>1. The student knows how to accurately describe the steps to solve the problem, which later helps him write programs correctly.</li> <li>2. The student's knowledge of the instructions of the C++ language.</li> <li>3. The student's knowledge of data types and how to express them programmatically.</li> <li>4. The student's knowledge of data entry methods.</li> </ol>   |   |



**/ Curriculum for the subject / Structured Programming  
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|  |
|--|
| <p>5. The student's knowledge of how to process data and how to extract it.</p> <p>B - The skills objectives of the course</p> <ol style="list-style-type: none"> <li>1. Use the appropriate set of instructions to solve the problem.</li> <li>2. Being able to represent what the student has learned theoretically in a practical way in the laboratory.</li> <li>3. Being able to draw a flow chart to solve a specific problem.</li> <li>4. Being able to determine the time taken to implement the algorithm. .</li> </ol> |
| <p>10 Teaching and learning methods</p> <ol style="list-style-type: none"> <li>1. Method of delivery and discussion style.</li> <li>2. Laboratory activities and additional exercises as assignments.</li> <li>3. Daily and monthly exams.</li> </ol>  |
| <p>11. Evaluation methods</p> <ol style="list-style-type: none"> <li>1- Conducting daily/monthly/final theoretical and practical tests.</li> <li>2- Duties.</li> <li>3- Conducting oral exams.</li> </ol>  |
| <p>12 Emotional and value goals</p> <ol style="list-style-type: none"> <li>1- Realizing the impact of the computer on the development of human thought and the advancement of science and technology.</li> <li>2- Appreciate the importance of solving problems programmatically instead of manual solutions.</li> <li>3- The desire to explore information, solve problems, and derive new information for specific purposes.</li> </ol>  |
| <p>13- Teaching and learning methods</p> <ol style="list-style-type: none"> <li>1- Presenting traditional solutions to some problems and comparing them with modern solutions.</li> <li>2- Present some advanced problems and instruct the student to search for them on the Internet.</li> <li>3- Additional exercises at home and encouraging students to actively participate in solving some class exercises on the board inside the classroom.</li> </ol>   |
| <p>Evaluation methods -14</p> <ol style="list-style-type: none"> <li>1. Discussion and dialogue.</li> <li>2. .Reports preparation</li> </ol>   |
| <p>15 - General and qualifying transferable skills (other skills related to employability and personal development)</p>  |

**/ Curriculum for the subject / Structured Programming  
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|   |  |          |
|---|--|----------|
| 1- That the student is able to employ the knowledge he has acquired.<br>2- To be able to benefit from knowledge.<br>3- To acquire teaching skills.<br>4- Positive thinking. |  |          |
| 16- Course structur   |  |          |
| the topic   | hours  | the week |
| <b>Algorithms &amp; flowcharts</b>  | 12   | 3        |
| <b>Introduction of C++ language</b>   | 4  | 1        |
| <b>Data types</b>   | 4  | 1        |
| <b>General tools of C++ language<br/>Arithmetic, logical, relational</b>  | 12   | 3        |
| <b>Decrement, and assignment<br/>operators of C++ language</b>  | 4  | 1        |
| <b>Operators<br/>precedence in C++ language &amp;<br/>comment</b>   | 4  | 1        |
| <b>Variables and constants and<br/>reserved words</b>   | 4  | 1        |
| <b>Conditional statements</b>   | 8  | 2        |
| <b>Loop statements</b>  | 8  | 2        |
| <b>Nesting loops</b>  | 8  | 2        |
| <b>Jump statement</b>   | 8  | 2        |
| <b>1D-Arrays</b>  | 8  | 2        |
| <b>2D-Arrays</b>  | 8  | 2        |
| <b>C++ Strings</b>  | 8  | 2        |
| <b>Functions</b>  | 12   | 3        |
| <b>Files</b>  | 8  | 2        |
| <b>Sources .17</b>  |  |          |
| <b>Required<br/>prescribed books</b>  | 1. Stanley B. Lippman , Josée Lajoie , and<br>Barbara E. Moo, "C ++ Primer", fourth<br>edition, 2005.<br>2. Juan Soulié , “C++ Language Tutorial”, 2008. |          |
| <b>Main references</b>  | 1. Juan Soulié , “C++ Language Tutorial”, 2008.<br>2. Juan Soulié , “C++ Language Tutorial”, 2008.   |          |

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|  | <b>3. 3. Bäckman , K., 2015. <i>Structured Programming with C++</i> . Bookboon</b> |
|--|--|

## Course Description Form

| 1. Course Name: Computer Organization   |   |                                       |  |                                |   |
|---|---|---------------------------------------|--|--------------------------------|---|
|   |   |                                       |  |                                |   |
| 2.Course Code:  |   |                                       |  |                                |   |
|   |   |                                       |  |                                |   |
| 2. Season/Year 2024-2025  |   |                                       |  |                                |   |
|   |   |                                       |  |                                |   |
| 3.Date of preparation of this description 2-3-2024                              |   |                                       |  |                                |   |
|   |   |                                       |  |                                |   |
| 4.Forms of attendance available on a daily basis                                |   |                                       |  |                                |   |
|   |   |                                       |  |                                |   |
| 5. of study hours (total) / Number of units (total) 60 Theoretical 60 Practical |   |                                       |  |                                |   |
|   |   |                                       |  |                                |   |
| 6.The name of the course leader (if more than one name is mentioned)            |   |                                       |  |                                |   |
| Name: Hiyam Nadhem Khali  |   |                                       |  |                                |   |
| Email : hiyam.nk@uomisan.edu.iq   |   |                                       |  |                                |   |
| 1. Course Objectives  |   |                                       |  |                                |   |
| Objectives of the course  | Students acquire positive and purposeful tendencies towards information technology in general and strengthen their desire towards computers.<br>It also develops mental skills that enable the student to utilise the information he learns and the skills he acquired and employ them in serving him as an individual and in serving the goals of society. |                                       |  |                                |   |
| 1. Teaching and learning strategies   |   |                                       |  |                                |   |
| The strategy  |   |                                       |  |                                |   |
| 1. بنية المقرر  |   |                                       |  |                                |   |
| Week  | Hours   | Unit or topic name                    | Required Learning Outcomes                         | Method of learning             | Assessment method                                     |
| 1   | 2 theoretical +<br>2 practical  | Representation of numbers and symbols | Learn how to represent numbers                     | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 2   | 2 theoretical +<br>2 practical  | Processor Architecture                | And the symbols in the calculator                  | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 3   | 2 theoretical +<br>2 practical  | Fetch and Execution                   | How to retrieve information And its implementation | Dialogue method and discussion | Lectures+ Labs  |

|    |                             |   |   |                                |   |
|----|-----------------------------|---|---|--------------------------------|---|
|    |                             |   |   |                                | Daily and monthly exams+ Final Exam                   |
| 4  | 2 theoretical + 2 practical | Vectors, registers, arithmetic and logic unit | Identify vectors and registers                          | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 5  | 2 theoretical + 2 practical | Control unit                                  | Arithmetic and verbal operations                        | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 6  | 2 theoretical + 2 practical | Random access memory read only memory         | Identify the unit                                       | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 7  | 2 theoretical + 2 practical | Virtual memory                                | Control in the processor                                | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 8  | 2 theoretical + 2 practical | Cache memory                                  | The student learns about a memory                       | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 9  | 2 theoretical + 2 practical | Input and output system basic's               | RAM ROM   | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 10 | 2 theoretical + 2 practical | Hard Disk                                     | Memory recognition                                      | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 11 | 2 theoretical + 2 practical | CD  | Imaginary   | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 12 | 2 theoretical + 2 practical | Input and output devices                      | The student gets to know                                | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 13 | 2 theoretical + 2 practical | , Keyboard Touch screen, mouse                | Critical memory   | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 14 | 2 theoretical + 2 practical | printer, display Output                       | Learn about printers and their types And its components | Dialogue method and discussion | Lectures+ Labs<br>Daily and monthly exams+ Final Exam |
| 15 | 2 theoretical +             | Model for                                     | Identify the most important                             | Dialogue method                | Lectures+   |

|  |    |                                |   |  |                                   |   |
|--|----|--------------------------------|---|--|-----------------------------------|---|
|  |    | 2 practical                    | processor<br>8088/8088  | differences between                                    | and discussion                    | Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam              |
|  | 16 | 2 theoretical +<br>2 practical | .8088/8086<br>general-purpose<br>registers, records<br>indexing and<br>Mark, media<br>records | Healers  | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 17 | 2 theoretical +<br>2 practical | Data<br>transmission  | The student gets to know the<br>most important records | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 18 | 2 theoretical +<br>2 practical | Programming<br>languages  | And media for therapists                               | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 19 | 2 theoretical +<br>2 practical | Compilers,<br>Assembly  | The student gets to know                               | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 20 | 2 theoretical +<br>2 practical | Interpreter,<br>translator  | Data transfer methods                                  | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 21 | 2 theoretical +<br>2 practical | Memory, address<br>data organization  | Learn about God's language                             | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 22 | 2 theoretical +<br>2 practical | Memory<br>segmentation,   | and high-level languages                               | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 23 | 2 theoretical +<br>2 practical | generation a<br>memory address<br>space(logical and<br>physical address)                      | The student gets to know<br>translators                | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 24 | 2 theoretical +<br>2 practical | assembly Set<br>instruction   | Assembly   | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 25 | 2 theoretical +<br>2 practical | Transfer<br>instruction   | The student gets to know the<br>interpreter            | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 26 | 2 theoretical +<br>2 practical | Arithmetic<br>instruction   | The translator   | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 27 | 2 theoretical +                | Instruction   | To get to know the student                             | Dialogue method                   | Lectures+   |

|  |    |                                |                                  |  |                                   |   |
|--|----|--------------------------------|----------------------------------|--|-----------------------------------|---|
|  |    | 2 practical                    | Logical                          |  | and discussion                    | Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam              |
|  | 28 | 2 theoretical +<br>2 practical | Input<br>programming<br>methods  | On addressing patterns                   | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 29 | 2 theoretical +<br>2 practical | Output<br>programming<br>methods |  | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |
|  | 30 | 2 theoretical +<br>2 practical | Pipelining Design<br>Techniques  | For the student to recognize<br>passages | Dialogue method<br>and discussion | Lectures+<br>Labs<br>Daily and<br>monthly<br>exams+<br>Final Exam |

## 11. Course evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc.

## 12. Learning and teaching resources

|  |   |
|--|---|
| Required textbooks (methodology, if any)                                       | 2003 s'Norton Peter for computers to Introduction   |
| Main references (sources)  | THE INTEL MICROPROCESSORS 8086/8088,<br>80186/80188, 80286, 80386, 80486, Pentium, Pentium Pro<br>Processor, Pentium II, Pentium III, Pentium 4,<br>and Core2 with 64-Bit Extensions Architecture,<br>Programming,<br>and Interfacing<br>Eighth Edition BARRY B. BREY 2009.<br>"Fundamentals of computer organization and<br>architecture"<br>By John wiley & Sons, 2005. |
| Recommended supporting books and references (scientific journals, reports....) | support.microsoft.com   |
| Electronic references, Internet sites  | 2003 s'Norton Peter for computers to Introduction   |

## Model Course Description

|  |               |                         |                                    |                             |      |
|--|---------------|-------------------------|------------------------------------|-----------------------------|------|
| .121 names The decision  |               |                         |                                    |                             |      |
| Structures intermittent  |               |                         |                                    |                             |      |
| .122 symbolThe decision:   |               |                         |                                    |                             |      |
| 109CsDs  |               |                         |                                    |                             |      |
| .123 the chapter/ year   |               |                         |                                    |                             |      |
| Annual system 2025   |               |                         |                                    |                             |      |
| .124 Preparation date This description   |               |                         |                                    |                             |      |
| 2025/2/20  |               |                         |                                    |                             |      |
| .125 shapes Available attendance   |               |                         |                                    |                             |      |
| Weekly   |               |                         |                                    |                             |      |
| 126 number watches Academic(Total) number Units(Total)   |               |                         |                                    |                             |      |
| number watches2) theoretical( Weekly Total60 hours / number Units 4 units  |               |                         |                                    |                             |      |
| .127 names responsible The decision Academic ) if more from name It is mentioned(  |               |                         |                                    |                             |      |
| Name. Ayman Samir  |               |                         | Email: ayman.sameer@uomisan.edu.iq |                             |      |
| .128 Course objectives   |               |                         |                                    |                             |      |
| <ul style="list-style-type: none"><li>building mathematical background Good For students to divide sciencesCalculators</li><li>Benefit from it in to understand CoursesComputer Science Study</li><li>The decision Represents Applications practical For scienceMathematics in Computer.</li></ul>   |               |                         |                                    | Goals The material Academic |      |
| <ul style="list-style-type: none"><li>knowledge In concepts Basic For mathematics.</li><li>ρεχορνζεσ The student on importance Concepts Public And its relationship With science Calculators.</li><li>Ιδεντιφψ Most important Roads used in the solution .</li></ul>   |               |                         |                                    | A- Goals cognitive          |      |
| <ul style="list-style-type: none"><li>λεαρν The student use Ways and different methods in the solution.</li><li>Prepare qualified cadres To teach a subject mathematics and the computer in educational institutions.</li><li>Get to know How to connect And merge science mathematics And the computer together</li></ul>                             |               |                         |                                    | for - Goals Skills          |      |
| <ul style="list-style-type: none"><li>Use Skills Scientific and cognitive from during style Dialogue in Topics academy.</li><li>Consolidation spirit Participation between Students in solution Issues Different And work In spirit team Miniature.</li><li>Χονσολιδατιον And plant principle that Time is a factor necessary And important.</li></ul> |               |                         |                                    | C - Goals Value             |      |
| .129 Strategies education and learning   |               |                         |                                    |                             |      |
| <ul style="list-style-type: none"><li>strategyCooperative education</li><li>strategy Stormmental</li><li>strategy solutionproblems</li></ul>   |               |                         |                                    | Strategy                    |      |
| .130 structure The decision  |               |                         |                                    |                             |      |
| road Evaluation  | road learning | name Unity or the topic | Outputs learning Required          | watches                     | week |



|       |  |                         |                                   |    |       |
|-------|--|-------------------------|-----------------------------------|----|-------|
| Exams | recitation+Exa                                       | <b>Mathematical</b>     | use phrases                       | 10 | 5-1   |
| Exams | mples of   | <b>LogicSets Theory</b> | Get to knowGroups and their types | 10 | 10-6  |
| Exams | delivery<br>+Examples<br><br>recitation<br>+Examples | <b>Relations</b>        | knowledge Relations between       | 8  | 14-11 |

|       |                         |                                     |  |    |       |
|-------|-------------------------|-------------------------------------|--|----|-------|
|       |                         | <b>Exam</b>                         | <b>Groups and their operations</b>   | 2  | 15    |
| Exams | recitation<br>+Examples | <b>Maps</b>                         | <b>Exam</b>  | 10 | 20-16 |
| Exams | recitation<br>+Examples | <b>Elementary<br/>Number Theory</b> | Applications -<br>Types <b>Applications</b><br><b>Application</b><br><b>Installation</b> | 10 | 25-21 |
| Exams | recitation<br>+Examples | <b>Matrices</b>                     | Knowledge of<br>number systems-<br>Division algorithm<br>and its applications            | 8  | 29-26 |
|       |                         | <b>Exam</b>                         | <b>ModelsFrom the<br/>matrixMatrix<br/>algebra</b>                                       | 2  | 30    |
|       |                         |                                     | <b>Exam</b>  |    |       |

.131 ratings The decision

Grade distribution from100 according to the tasks assigned to the student, such as daily preparation, daily, oral and monthly exams.

Editorial and reporting....etc.

The course grade is distributed as follows:40) Annual effort 60+ marks Final exam (40 annual effort) theoretical

The effort score is calculated according to the following::

- Student activityDaily preparation, participation and discussion in the lecture
- Daily exams(Written + Oral)
- monthly exams

132 sources learning and teaching

books The decision

books The reporter Required ) methodology that I found (

|  |  |
|--|--|
| <ul style="list-style-type: none"> <li>theory and problems of discrete mathematics, by Seymour Lipschutz &amp; Marc Lars Lipson, Schaum's Outline Series, third edition 2007.</li> <li>mathematics foundation of computer science, YN Singh, 2005.</li> <li>Discrete Mathematics and Its Applications, Seventh Edition, Kenneth H. Rosen, AT&amp;TLaboratories, 2012.</li> </ul> | the reviewer President ) Sources(  |
| <ul style="list-style-type: none"> <li>Discrete Mathematics Structure with Application n Trem Sciences, Computer to Baly Manohar,1975.</li> <li>Discrete Mathematics, Richard Johnsonabaugh,Pearson, 2009.</li> </ul>  | booksand recommended supporting referencesMagazinesScientific, reports.... ( |

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>DISCRETE STRUCTURES, AMINW I T N O , Revision Notes and Problems 2006.</li> <li>Discrete mathematical structures for computer science by Bernard Colman &amp; Robert C. Busby</li> <li>Discrete mathematics fornew technology, Rowan Garnier &amp; John Taylor (Second Edition 2002).</li> </ul> |   |
| <ul style="list-style-type: none"> <li><a href="http://www.math.uvic.ca/faculty/gmacgill/guide">http://www.math.uvic.ca/faculty/gmacgill/guide</a></li> <li><a href="http://en.wikibooks.org/wiki/Discrete_mathematics_Set_theory">http://en.wikibooks.org/wiki/Discrete mathematics Set theory</a></li> </ul>                          | the reviewer electronic, Sites Internet |
| 133.plan development The decision Academic  |   |
| <p>addition some New topics For the rapporteuras follows:</p> <p>Functions- Classification of functions,</p> <ul style="list-style-type: none"> <li>•C</li> </ul> <p>haracterization of functions</p> <ul style="list-style-type: none"> <li>•So</li> <li>• me Important Functions</li> <li>• Recursively defined functions.</li> </ul> |   |

## Course description form

|  |
|--|
| 1. Course Name: Logic design   |
|  |
| 2.Course Code:   |
|  |
| 2. Season/Year 2025  |
|  |
|  |
| 3.Date of preparation of this description 2-3-2025   |
|  |
| 4.Forms of attendance available on a daily basis   |
|  |
| 5. of study hours (total) / Number of units (total) 60 Theoretical 60 Practical  |
|  |
| 6.The name of the course leader (if more than one name is mentioned)   |
| Name: Mohammed Hamdan Yousef<br>Email : <a href="mailto:mohammed1987hamdan@gmail.com">mohammed1987hamdan@gmail.com</a> |

| 1. Course objectives   |                                   |                             |                            |                                 |  |
|--|-----------------------------------|-----------------------------|----------------------------|---------------------------------|--|
| Introduction to the science of logical design<br>Introducing the student to the theoretical and practical skills of the logical design subject and how to design electronic logic circuits<br>And represent it with a calculator.<br>Preparing students to teach this subject to middle and middle school students.<br>Preparing students to work in various private and governmental sectors. |                                   |                             |                            | Objectives of the study subject |  |
| 2. Teaching and learning strategies  |                                   |                             |                            |                                 |  |
| Presenting theoretical material either through dialogue or displaying it on a screen. Applying theoretical material to the calculator.<br>Assignments and exercises.<br>Theoretical and practical lectures weekly.<br>There are discussion lessons and solving exercises.<br>Assigning the student to prepare periodic reports.  |                                   |                             |                            | The strategy                    |  |
| 3. Course structure  |                                   |                             |                            |                                 |  |
| week   | Learning method                   | Name of the unit or topic   | Required learning outcomes | hours                           | Evaluation method  |
| 1  | Dialogue method<br>And discussion | Chapter One: Number Systems | Chapter One: Number System | 2Theoretical<br>+<br>2practical | Lectures+<br>Laboratories+<br>Daily and monthly exams+<br>Final exam |

|   |                                   |  |  |                                 |  |
|---|-----------------------------------|--|--|---------------------------------|--|
|   |                                   |  |  |                                 |  |
| 2 | Dialogue method<br>And discussion | Chapter One:<br>Number Systems                           | Decimal numbers<br>Decimal numbers<br>Fractions of numbers<br>Their weights                            | 2Theoretical<br>+<br>2practical | Lectures+<br>Laboratories+<br>Daily and<br>monthly<br>exams+<br>Final exam |
| 3 | Dialogue method<br>And discussion | Chapter One:<br>Number Systems                           | Eight numbers<br>exadecimal numbers  | 2Theoretical<br>+<br>2practical | Lectures+<br>Laboratories+<br>Daily and<br>monthly<br>exams+<br>Final exam |
| 4 | Dialogue method<br>And discussion | Chapter Two: Converting<br>Numbers                       | Conversion from deci<br>system to other numer<br>systems Binary octal, 1<br>handed hexa And vice versa | 2Theoretical<br>+<br>2practical | Lectures+<br>Laboratories+<br>Daily and<br>monthly<br>exams+<br>Final exam |
| 5 | Dialogue method<br>And discussion | Chapter Three:<br>Mathematical Operations<br>For numbers | Add and<br>subtract numbers<br>in many ways  | 2Theoretical<br>+<br>2practical | Lectures+<br>Laboratories+<br>Daily and<br>monthly<br>exams+<br>Final exam |
| 6 | Dialogue method<br>And discussion | Chapter Three:<br>Mathematical Operations<br>For numbers | The first complement<br>and the complement<br>The second and its<br>mathematical operations            | 2Theoretical<br>+<br>2practical | Lectures+<br>Laboratories+   |

|    |                                   |  |                                       |                                 |   |
|----|-----------------------------------|--|---------------------------------------|---------------------------------|---|
|    |                                   |  |                                       |                                 | Daily and monthly exams+ Final exam                         |
| 7  | Dialogue method<br>And discussion | Multiply and divide numbers              | Multiply and divide numbers           | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 8  | Dialogue method<br>And discussion | Chapter Four:<br>Numbers without weights | Knowledge of BCD and BCD numbers EX-3 | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 9  | Dialogue method<br>And discussion | Chapter Four:<br>Numbers without weights | Binary to Gray                        | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 10 | Dialogue method<br>And discussion | Chapter 5<br>Boolean algebra             | Logic gates<br>And the truth table    | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 11 | Dialogue method<br>And discussion | Boolean algebra                          | Simplifying Boolean equations         | 2Theoretical<br>+               | Lectures+ Laboratories+                                     |

|    |                                   |                           |   |                                 |  |
|----|-----------------------------------|---------------------------|---|---------------------------------|--|
|    |                                   |                           |   | 2practical                      | Daily and monthly exams+ Final exam                            |
| 12 | Dialogue method<br>And discussion | Boolean algebra           | Use of logic gates<br>And learn about its types<br>And its outputs              | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+<br>Daily and monthly exams+ Final exam |
| 13 | Dialogue method<br>And discussion | Chapter Six Demorcan Laws | Using Demorcan's Laws<br>in Abbreviations                                       | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+<br>Daily and monthly exams+ Final exam |
| 14 | Dialogue method<br>And discussion | Karnov Map                | Learn about<br>adding multiplication<br>Learn about<br>multiplication of groups | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+<br>Daily and monthly exams+ Final exam |
| 15 | EXAM                              | EXAM                      | EXAM  | EXAM                            | Lectures+ Laboratories+<br>Daily and monthly exams+ Final exam |
| 16 | Dialogue method<br>And discussion | Karnov Map                | Construct a brief logical syst  | 2Theoretical<br>+               | Lectures+ Laboratories+  |

|    |                                |   |                                       |                           |   |
|----|--------------------------------|---|---------------------------------------|---------------------------|---|
|    |                                |   |                                       | 2practical                | Daily and monthly exams+ Final exam                         |
| 17 | Dialogue method And discussion | Chapter Seven Logical Analysis For groups | ull adder& half                       | 2Theoretical + 2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 18 | Dialogue method And discussion | Chapter Seven Full Adder /Full subtractor | full adder                            | 2Theoretical + 2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 19 | Dialogue method And discussion | Chapter Seven Full Adder /Full subtractor | half &full subtractor                 | 2Theoretical + 2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 20 | Dialogue method And discussion | Use comparisons                           | ,Using logic gates To compare numbers | 2Theoretical + 2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 21 | Dialogue method And discussion | Use comparisons                           | Convert numbers using Logic gates     | 2Theoretical +            | Lectures+ Laboratories+                                     |



|    |                                |              |   |                           |   |
|----|--------------------------------|--------------|---|---------------------------|---|
|    |                                |              |   | 2practical                | Daily and monthly exams+ Final exam                         |
| 22 | Dialogue method And discussion | Half-Adder   | Half-Adder                                    | 2Theoretical + 2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 23 | Dialogue method And discussion | Decoders     | Student knowledge of operations<br>Decryption | 2Theoretical + 2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 24 | Dialogue method And discussion | Exam         | Exam  | 2Theoretical + 2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 25 | Dialogue method discussion     | Encoders     | Know the student on Encryption operations     | 2Theoretical + 2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 26 | Dialogue method discussion     | Multiplexers | Learn how to transfer information in          | 2Theoretical +            | Lectures+ Laboratories+                                     |

|    |                            |                |   |                                 |   |
|----|----------------------------|----------------|---|---------------------------------|---|
|    |                            |                | Damm or voter   | 2practical                      | Daily and monthly exams+ Final exam                         |
| 27 | Dialogue method discussion | DE multiplexer | How to learn in this device<br>On one entry and one exit<br>Multi | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 28 | Dialogue method discussion | Memories       | Learning on types of memory<br>RAM                                | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 29 | Dialogue method discussion | Memories       | Learning types of memory<br>ROM                                   | 2Theoretical<br>+<br>2practical | Lectures+ Laboratories+ Daily and monthly exams+ Final exam |
| 30 | Exam                       | Exam           | Exam  |                                 |   |

### 11. Course evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc.

### 12.Learning and teaching resources

|  |   |
|--|---|
| 1-Digital Logic Fundamentals 9th edition (Thomas L. Floyd) | Required textbooks (methodology, if any)  |
| Digital Logic And Computer Design By M. Morris Mano        | Main references (sources)   |
| Translator of basics of logic and computer design          | Recommended supporting books and references<br>(scientific journals, reports....) |
|  | Electronic references, Internet sites   |

## Mathematics Course Description Form

|   |
|---|
| 1. Course Title: Mathematics  |
| 2. Course Code: 101CsMa   |
| 3. Semester/Year: Annual  |
| 4. Date of Preparation: 5/4/2025  |
| 5. Available Attendance Formats: In-person - Weekly                             |
| 6. Number of Weekly Class Hours (2) and Units (4)                               |
| 7. Name of Course Supervisor (if more than one name is provided)                |
| Name: Asst. Prof. Dr. Ala' Najim Abdullah<br>Email: mr.ala_najim@uomisan.edu.iq |

|                      |  |
|----------------------|--|
| 8. Course Objectives |  |
| Course Objectives    | <p>Cognitive Objectives</p> <ul style="list-style-type: none"> <li>- The student will learn the mathematical rules for solving a specific exercise.</li> <li>- The student will remember specific facts and symbols to perform direct calculations.</li> <li>- The student will recognize the graphical representation of some functions.</li> </ul> <p>Skill Objectives</p> <ul style="list-style-type: none"> <li>- The student will graph functions, for example.</li> <li>- The student will possess the ability to perform mental calculations, estimate answers, and verify their accuracy. - The student applies mathematics in multiple fields.</li> </ul> |

|  |  |
|--|--|
|  | <p>Affective and Value-Based Objectives</p> <ul style="list-style-type: none"> <li>- The student participates in discussions and solves activities during lectures.</li> <li>- The student develops positive attitudes toward mathematics.</li> <li>- The student desires to spend additional time reading mathematics and solving mathematical problems.</li> <li>- The student recognizes the aesthetic aspects of geometric shapes in their environment.</li> </ul> |
|--|--|

| 9. Teaching and Learning Strategies |  |
|-------------------------------------|--|
| Strategy                            | <p>Using various teaching strategies:</p> <ul style="list-style-type: none"> <li>● Presentation method and discussion style.</li> <li>● Additional exercises as homework.</li> <li>● Scientific books.</li> <li>● Questioning method.</li> <li>● Brainstorming method</li> </ul> |
| 10. Course Development Plan         |  |
| Development                         | <p>The course was developed by adding some topics useful to students, such as set theory, geometric representation of trigonometric functions, and others, as well as adding diverse and varied examples for most of the specified topics.</p>                                   |

## 11. Course Structure

| Week  | Hours     | Required Learning Outcomes   | Unit or Topic Name   | Learning Method     | Assessment Method                  |
|-------|-----------|--|--|---------------------|------------------------------------|
| 1-3   | 6 Theory  | Set Theory, The Intervals, finite intervals, infinite intervals.                           | Set Theory, The Intervals, finite intervals, infinite intervals.                           | Lecture, Discussion | Daily and Monthly Exams + Homework |
| 4-5   | 4 Theory  | Functions, Find Domain of Function, Algebra of Functions, Type of Functions                | Functions, Find Domain of Function, Algebra of Functions, Type of Functions                | Lecture, Discussion | Daily and Monthly Exams + Homework |
| 6-7   | 4 Theory  | Graph of functions, Limits and continuity. Graphing functions, Limits and continuity.      | Graph of functions, Limits and continuity. Graphing functions, Limits and continuity.      | Lecture, Discussion | Daily and Monthly Exams + Homework |
| 8-10  | 6 Theory  | Trigonometric functions: Trigonometric functions, Limits, Inverse trigonometric functions. | Trigonometric functions: Trigonometric functions, Limits, Inverse trigonometric functions. | Lecture, Discussion | Daily and Monthly Exams + Homework |
| 11-15 | 10 Theory | Logarithmic Functions: Common and Natural Logarithmic Functions,                           | Logarithmic Functions: Common and Natural Logarithmic Functions,                           | Lecture, Discussion | Daily and Monthly Exams + Homework |

|       |           |  |  |                     |                                    |
|-------|-----------|--|--|---------------------|------------------------------------|
|       |           | Exponential Functions, Hyperbolic Functions.   | Exponential Functions, Hyperbolic Functions  |                     |                                    |
| 16-20 | 10 Theory | Derivatives: Differentiation Rules, Chain Rule Derivatives of Trigonometric, Logarithmic, and Exponential Functions. | Derivatives: Differentiation Rules, Chain Rule Derivatives of Trigonometric, Logarithmic, and Exponential Functions. | Lecture, Discussion | Daily and Monthly Exams + Homework |
| 21-25 | 10 Theory | Integration: Integration Rules Integration of Trigonometric Functions.   | Integration: Integration Rules Integration of Trigonometric Functions.   | Lecture, Discussion | Daily and Monthly Exams + Homework |
| 26-30 | 10 Theory | Sequences and Series: Definition of Sequence, Series (Finite and Infinite), Power Series.                            | Sequences and Series: Definition of a Sequence, Series (Finite and Infinite), Power Series.                          | Lecture, Discussion | Daily and Monthly Exams + Homework |

|   |  |
|---|--|
| 12. Course Evaluation   |  |
| Exams Monthly (40), daily preparation and daily exams (10), and final exams (50). |  |
| 13. Learning and Teaching Resources   |  |
| Required textbooks (methodology, if available)                                    | (Thomas Calculus, "Including Second-Order Differential Equation", 2005). |

|                                    |  |
|------------------------------------|--|
| Main References<br>(Sources)       | <p>1. Thomas Calculus, "Including Second-Order Differential Equation", 2005.</p> <p>2. MATH 221 First Semester CALCULUS, 2009.</p> |
| Electronic References,<br>Websites | There are many websites related to each required learning outcome.   |



## Course description form

| 1. Course Name: Foundations of education   |                           |   |  |       |  |
|--|---------------------------|---|--|-------|--|
| 2.Course Code:   |                           |   |  |       |  |
| 2. Season/Year 2025-2024   |                           |   |  |       |  |
| 3.Date of preparation of this description 20/2/2025  |                           |   |  |       |  |
| 4.Forms of attendance available on a daily basis: daily  |                           |   |  |       |  |
| 5. of study hours (total) / Number of units (total) 60 Theoretical 60 Practical:1  |                           |   |  |       |  |
| 6.The name of the course leader (if more than one name is mentioned)   |                           |   |  |       |  |
| Name: sara kazim abdalkaram<br>Email : sarah.kazem@uomisan.edu.iq  |                           |   |  |       |  |
| 8. Course objectives   |                           |   |  |       |  |
| 1- The student understands the meaning of education, its goals and principles, and that education is the basic means to achieve philosophy of the state He also learns about the principles of primitive education.<br><br>2- The student differentiates between education and teaching and understands the relationship between education, technology and environment.<br>3- Make the student feel the value of ancient civilizations that played a prominent role in the progress of societies and explain achievements of some scientists in this field.<br>4- Learn about the importance of the family in society, and explain its role in building individuals with integrated personalities in aspects.<br><br>5- The student understands that education is the basis for the economic process and development.<br>6- The student learns about modern education and secondary education in Iraq. |                           |   |  |       |  |
| 9. Teaching and learning strategies  |                           |   |  |       |  |
| <ul style="list-style-type: none"> <li>• <b>Discussion strategy</b></li> <li>• <b>Group work strategy</b></li> <li>• <b>Brainstorming strategy</b></li> <li>• <b>Reciprocal teaching strategy</b></li> </ul>   |                           |   |  |       |  |
| 10. Course structure   |                           |   |  |       |  |
| week   | Learning method           | Name of the unit or topic   | Required learning outcomes                           | Hours | Evaluation method                            |
| 1.   | Lecture and interrogation | It is necessary for the student to know the meaning of education and its goals. | The meaning of education and its goals and necessity | 1     | Oral assessment, exams and daily assignments |
| 2.   | Lecture and interrogation | The student should know the types of education                                  | Educational patterns                                 | 1     | Oral assessment, exams and daily assignments |
| 3.   | Lecture and interrogation | The student should know the difference between education and teaching           | The difference between education and teaching        | 1     | Oral assessment, exams and daily assignments |
| 4.   | Lecture and interrogation | The student should learn about primitive education.                             | Primitive education                                  | 1     | Oral assessment, exams and daily assignments |
| 5.   | Lecture and interrogation | The student should learn about education in the Nile Valley and Mesopotamia.    | Education in the Nile Valley and Mesopotamia         | 1     | Oral assessment, exams and daily assignments |

|     |                           |   |   |   |  |
|-----|---------------------------|---|---|---|--|
| 6.  | Lecture and interrogation | The student should learn about ancient schools and their cultural message.  | Old schools and their cultural message                | 1 | Oral assessment, exams and daily assignments |
| 7.  | Lecture and interrogation | The student should learn about Chinese education.   | Chinese education                                     | 1 | Oral assessment, exams and daily assignments |
| 8.  | Lecture and interrogation | The student should be familiar with the examination system in Chinese education.  | Examination system in Chinese education               | 1 | Oral assessment, exams and daily assignments |
| 9.  | Lecture and interrogation | The student should be familiar with Spartan and Greek education.  | Spartan and Greek education                           | 1 | Oral assessment, exams and daily assignments |
| 10. | Lecture and interrogation | The student should be familiar with ethnic education.   | Ethnic education                                      | 1 | Oral assessment, exams and daily assignments |
| 11. | Lecture and interrogation | The student should be familiar with the philosophy of Arab education.   | Philosophy of Arab education                          | 1 | Oral assessment, exams and daily assignments |
| 12. | Lecture and interrogation | The student should learn about the stages of Islamic education. The student should learn about the educational institutions and institutes among Muslims. | Stages of Islamic education                           | 1 | Oral assessment, exams and daily assignments |
| 13. | Lecture and interrogation | The student should learn about the stages of Islamic education. The student should learn about the educational institutions and institutes among Muslims. | Educational institutions and institutes among Muslims | 1 | Oral assessment, exams and daily assignments |
| 14. | Lecture and interrogation | The student should get to know the teachers in Islam  | Teachers in Islam                                     | 1 | Oral assessment, exams and daily assignments |
| 15. | Lecture and interrogation | The student should get to know the notable figures of Islamic educational thought   | Islamic Educational Thought                           | 1 | Oral assessment, exams and daily assignments |
| 16. | Lecture and interrogation | The student should get to know Ibn Sina, Al-Ghazali, Jabir bin Hayyan   | Ibn Sina Al-Ghazali Jabir bin Hayyan                  | 1 | Oral assessment, exams and daily assignments |
| 17. | Lecture and interrogation | The student should get to know the social basis of education  | The Social Basis of Education                         | 1 | Oral assessment, exams and daily assignments |
| 18. | Lecture and interrogation | The student should get to know the role of the family in the educational process  | The Role of the Family in the Educational Process     | 1 | Oral assessment, exams and daily assignments |
| 19. | Lecture and interrogation | The student should get to know the role of the family in educational problems   | The Role of the Family in Educational Problems        | 1 | Oral assessment, exams and daily assignments |
| 20. | Lecture and interrogation | The student should get to know the relationship between culture and education   | The Relationship between Culture and Education        | 1 | Oral assessment, exams and daily assignments |
| 21. | Lecture and interrogation | The student should get to know environmental education and curricula  | Environmental Education and Curricula                 | 1 | Oral assessment, exams and daily assignments |
| 22. | Lecture and interrogation | The student should get to know Islamic trends   | Islamic Trends  | 1 | Oral assessment, exams and daily assignments |
| 23. | Lecture and interrogation | The student should get to know the economic basis of education  | The economic basis of education                       | 1 | Oral assessment, exams and daily assignments |

|  |                           |   |  |   |  |
|--|---------------------------|---|--|---|--|
| 24.  | Lecture and interrogation | The student should become familiar with the scientific basis of education           | The scientific basis of education  | 1 | Oral assessment, exams and daily assignments |
| 25.  | Lecture and interrogation | The student should become familiar with the national and ethnic foundations         | National and nationalist foundations   | 1 | Oral assessment, exams and daily assignments |
| 26.  | Lecture and interrogation | The student should become familiar with the figures of Western educational thought. | Modern education   | 1 | Oral assessment, exams and daily assignments |
| 27.  | Lecture and interrogation | The student should become familiar with the figures of Western educational thought. | Media of Western educational thought   | 1 | Oral assessment, exams and daily assignments |
| 28.  |                           |   |  |   |  |
| 29.  |                           |   |  |   |  |
| 30.  |                           |   |  |   |  |
| 11. Course evaluation  |                           |   |  |   |  |
| Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc. |                           |   |  |   |  |
| 12. Learning and teaching resources  |                           |   |  |   |  |
| University-required vocabulary   |                           |   |  |   |  |
| Main References (Sources)  |                           |   | The book (Foundations and Principles of Education) by Faisal Abdul Munshed The book Basics of Education by Khalif Yousef Al-Tarawneh The book Principles of Education by Ahmed Haqi Al-Hilli, Nouri Abbas Abdullah |   |  |
| Recommended supporting books and references (scientific journals, reports...)  |                           |   | The book (Foundations and Principles of Education) by Faisal Abdul Munshed The book Basics of Education by Khalif Yousef Al-Tarawneh The book Principles of Education by Ahmed Haqi Al-Hilli, Nouri Abbas Abdullah |   |  |
| Electronic references, Internet sites  |                           |   | <a href="http://mktba.net/library.php?id=13197">http://mktba.net/library.php?id=13197</a>  |   |  |

# English Language Course Syllabus – Computer Education Department

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## General Information:

College: College of Education

Department: Computer Education

Stage: first Year

Course Title: English Language

Academic Year: 2024–2025

Course Duration: Two Semesters

Weekly Hours: 2 hours

Instructor: **[Fatima Rahim Jabbar]**

## General Aims of the Course:

1. Build students' foundational English language skills to support academic study and future professional needs.
2. Equip students with basic grammar and vocabulary essential for understanding and producing technical texts.
3. Enhance students' confidence and competence in reading and writing English in computing-related contexts.
4. Encourage effective communication in both written and spoken English within academic and technical environments.

## Course Learning Outcomes (CLOs):

By the end of this course, students will be able to:

1. Understand and apply fundamental English grammar and sentence structures.
2. Read and comprehend general and technical texts related to computing.
3. Use relevant vocabulary in IT and academic contexts.
4. Communicate effectively in written formats such as emails, reports, and summaries.
5. Deliver short technical presentations in English with clarity.

## Skill-Based Objectives (Psychomotor Skills):

By the end of the course, students will be able to:

1. Apply correct English grammar in writing clear and accurate technical sentences.
2. Practice reading and analyzing short technical texts related to computer science.
3. Compose professional emails, reports, and short summaries in English.
4. Use appropriate technical vocabulary in spoken and written communication.

5. Deliver structured oral presentations using clear pronunciation and intonation.
6. Participate in pair or group tasks using English for academic discussion.

### Teaching and Learning Strategies:

To achieve the intended learning outcomes, the following strategies will be used:

1. Interactive Lectures – to explain grammatical rules and vocabulary in context.
2. Task-Based Learning – through activities like writing reports or emails.
3. Collaborative Learning – pair and group work to enhance communication.
4. Problem-Solving Tasks – using English to discuss and resolve academic problems.
5. Role-Play and Simulations – for practicing real-life communication situations.
6. Multimedia and Technology Integration – using videos, software, and presentations.
7. Peer Review and Feedback – to develop critical thinking and self-correction.

### Assessment Methods:

- Class participation and attendance: 10%
- Homework and assignments: 20%
- Quizzes and tests: 30%
- Final written and oral exams: 40%

### Course Structure:

| Week | Topic                             | Hours | Notes                     |
|------|-----------------------------------|-------|---------------------------|
| 1    | Introduction to Technical English | 2     | –                         |
| 2    | Parts of Speech                   | 2     | Grammar focus             |
| 3    | Verb Tenses                       | 2     | Past, Present, Future     |
| 4    | Sentence Structure                | 2     | Simple, compound, complex |
| 5    | Vocabulary in IT                  | 2     | Basic technical terms     |
| 6    | Reading Comprehension I           | 2     | Short IT texts            |
| 7    | Writing Emails                    | 2     | Formal/informal           |

|    |                                   |   |                           |
|----|-----------------------------------|---|---------------------------|
| 8  | Midterm Revision & Practice       | 2 | –                         |
| 9  | Midterm Exam                      | 2 | –                         |
| 10 | Passive and Active Voice          | 2 | Grammar application       |
| 11 | Conditional Sentences             | 2 | Real/unreal conditions    |
| 12 | Reading Comprehension II          | 2 | Longer texts              |
| 13 | Writing Reports and Summaries     | 2 | Academic focus            |
| 14 | Presentation Skills               | 2 | Using slides              |
| 15 | Final Exam                        | 2 | Written + Oral            |
| 16 | Introduction to Technical English | 2 | –                         |
| 17 | Parts of Speech                   | 2 | Grammar focus             |
| 18 | Verb Tenses                       | 2 | Past, Present, Future     |
| 19 | Sentence Structure                | 2 | Simple, compound, complex |
| 20 | Vocabulary in IT                  | 2 | Basic technical terms     |
| 21 | Reading Comprehension I           | 2 | Short IT texts            |
| 22 | Writing Emails                    | 2 | Formal/informal           |
| 23 | Midterm Revision & Practice       | 2 | –                         |
| 24 | Midterm Exam                      | 2 | –                         |
| 25 | Passive and Active Voice          | 2 | Grammar application       |

|    |                               |   |                        |
|----|-------------------------------|---|------------------------|
| 26 | Conditional Sentences         | 2 | Real/unreal conditions |
| 27 | Reading Comprehension II      | 2 | Longer texts           |
| 28 | Writing Reports and Summaries | 2 | Academic focus         |
| 29 | Presentation Skills           | 2 | Using slides           |
| 30 | Final Exam                    | 2 | Written + Oral         |

## Course Description

|   |                          |
|---|--------------------------|
| 1. Course name : <b>human rights</b>  |                          |
| 2. Course code: <b>110CsHR</b>  |                          |
| 3. semester/year Annual   |                          |
| 4. Date this description was prepared Academic year (2024-2025)   |                          |
| 5. Available attendance forms: presence <b>daily</b>  |                          |
| 6. Number of study hours (total) One hour per week / <b>Number of units (total) (1)</b>   |                          |
| 7. Name of the course administrator (if more than one name is mentioned)  |                          |
| <b>the name M.M. Ali Abdullah Abbas Al-Khazaali</b> <span style="float: right;"><b>Email: alialkzali165@gmail.co</b></span>   |                          |
| 8. Course objectives  |                          |
| 1- <b>Definition</b> The importance of human rights and their important role in creating a spirit of tolerance and cooperation among members of society to promote civil peace. , And useThe language of dialogue in solving problems instead of using violence.<br>2- <b>Consolidation</b> The principle of commitment to the law, knowledge of rights and duties, and not harming others under the pretext of freedom ,Man knows his limits because they end. whenfreedom of others.<br>3- <b>knowledge</b> The relationship between human rights, freedom and democracy in accordance with the nature of the society in which one lives.   | <b>Course objectives</b> |
| <b>A-Objectivescognitive</b><br><b>A 1-that</b> The student knows the importance of studying human rights..<br><b>A 2 -Empowerment</b> The student must be armed with a culture of human rights to create a generation aware of the language of dialogue..<br><b>A 3 -create</b> A student qualified to take his role in society through his knowledge of his rights and duties and how to practice freedom and democracy in a manner that is appropriate. withpeaceful transfer of power .<br><b>for -ObjectivesCourse-specific skills .</b><br><b>for 1-skill</b> DialogueAnd persuasion.<br><b>for 2 -ability</b> Working among people to spread awareness of the culture of human rights.<br><b>for 3 -capacity</b> Students assess themselves and their understanding of the principle of human rights and how to deal with it.. |                          |



## Methods Education and Learning

(Lecture, Discussion, interrogation, Discovery, education Integrated, learning active, Use Technological innovations, application The theoretical aspect is applied to real life situations through attending activities, workshops and seminars held by human rights organizations., Belonging For community human rights organizations and close interaction with humanitarian cases, Calendar The constructor) Tests Daily, group discussions (, Calendar Final) Tests Quarterly, worksheet (.

### C-Objectives Emotional and value-based

C 1-style Dialogue between the student And the professor.

C 2-Dialogue on Form groups among students .

C 3 -presence The professor and his students attend seminars on human rights and discuss mAI It was completed Presented at those seminars .

## Methods Education and Learning

Lecture (Traditional), discussion, questioning, cooperative learning, blended learning.

## Methods Evaluation

(Nutrition Student feedback, Test Surprise)

D -Skills General and transferable rehabilitation) Skills Other related to employability and personal development (.

D 1- The student should be armed with a culture of human rights and knowledge to employ it in the service of society..

D 2 -that Be a role model in the environment in which he lives.

D 3 -that Acquire the skill of managing dialogue and accepting the differences of others.

D 4- To learn for change and to develop awareness.

9. Teaching and learning strategies:

Strategy

10. Course structure

| Evaluation method | Learning method      | Name of unit or topic                                 | Required learning outcomes                              | watch es | week |
|-------------------|----------------------|---|---|----------|------|
|                   | Lecture + Discussion | A general introduction to the concept of human rights | The student understands what he receives in the lecture | 1        | 1    |
|                   | Lecture + Discussion | human nature  | The student understands what he receives in the lecture | 1        | 2    |

|  |                             |  |   |   |       |
|--|-----------------------------|--|---|---|-------|
|  | <b>Lecture + Discussion</b> | Defining rights and human rights<br>Its characteristics and types  | The student understands what he receives in the lecture | 1 | 3     |
|  | <b>Lecture + Discussion</b> | <b>The roots and development of human rights in human history</b>  | The student understands what he receives in the lecture | 1 | 4     |
|  | <b>Lecture + Discussion</b> | <b>Human rights in ancient civilizations</b>   | The student understands what he receives in the lecture | 1 | 5     |
|  | <b>Lecture + Discussion</b> | Human rights in religions and heavenly laws  | The student understands what he receives in the lecture | 1 | 6     |
|  | <b>Lecture + Discussion</b> | The development of the idea of protecting human rights in the modern era   | The student understands what he receives in the lecture | 1 | 7     |
|  | <b>Lecture + Discussion</b> | Human rights sources   | The student understands what he receives in the lecture | 1 | 8     |
|  | <b>Lecture + Discussion</b> | International covenants  | The student understands what he receives in the lecture | 1 | 9     |
|  | <b>Lecture + Discussion</b> | International Bill of Human Rights   | The student understands what he receives in the lecture | 1 | 10    |
|  | <b>Lecture + Discussion</b> | <b>International agreements on human rights</b><br><b>The human being that Iraq ratified</b><br><b>Before and after 2003</b> | The student understands what he receives in the lecture | 1 | 11    |
|  | <b>Lecture + Discussion</b> | interested UN bodies<br>Human rights and protection mechanisms<br>emanating from the Charter of the United Nations           | The student understands what he receives in the lecture | 1 | 12    |
|  | <b>Lecture + Discussion</b> | United Nations mechanism charged with protection<br>Human rights arising from Charter  | The student understands what he receives in the lecture | 1 | 13    |
|  | <b>Lecture + Discussion</b> | Human duties and responsibilities  | The student understands what he receives in the lecture | 1 | 14    |
|  | <b>Lecture + Discussion</b> | Restrictions on the practice of human rights   | The student understands what he receives in the lecture | 1 | 15-16 |
|  | <b>Lecture + Discussion</b> | Human rights in Iraq   | The student understands what he receives in the lecture | 1 | 17    |
|  | <b>Lecture + Discussion</b> | Rights and freedoms in the Constitution<br>The influential Iraqi of 2005   | The student understands what he receives in the lecture | 1 | 18    |
|  | <b>Lecture + Discussion</b> | Women and Human Rights   | The student understands what he receives in the lecture | 1 | 19    |

#### 11. Course Evaluation

The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

#### 12 Learning and Teaching Resources

|  |   |
|--|---|
| <b>Vocabulary</b> As decided by the Ministry within the sectoral committee   | Required textbooks (methodology if any)                                       |
| <b>Vocabulary</b> As decided by the Ministry within the sectoral committee   | Main references (sources)   |
| <b>books</b> and college resources   | Recommended supporting books and references (scientific journals, reports...) |
| <b>Locations</b> Reliable electronic means for providing them with information from reliable sources.<br><b>In it.</b>   | Electronic references, websites   |
| additionNew paragraphs for the article, in line with events on the Iraqi, Arab and international levels. And inLight of human rights and what He needs itNow, in conjunction with technological development and the information revolution and its challengesand human rights. | planCurriculum development  |

**Course Description Form / University of Maysan / College of Education / Department of Computer  
Science / First Stage.**

|  |   |
|--|---|
| Arabic   | 1. Course name  |
| 107CsAL  | 2. codeThe decision:  |
| annual   | 3. the chapter /Year:   |
| 2024/2025  | 4. Date preparedDescription:  |
| Lectures are delivered in person to students according to the schedule<br>announced by the college.  | 5. AAavailable attendance<br>forms:                                 |
| 30 hours (1 hour per week * 30 weeks)  | 6. Number of study hours<br>(total) / Number of units<br>(total)    |
| Name: Asst.Lect. Ali Ghazi Mohammed<br><br>Ali.ghazi@uomisan.edu.iq  | 7. Course Instructor Name(If<br>more than one name is<br>mentioned) |
| 8. Course objectives   |   |
| <div>Correcting the tongue and hand from falling into linguistic errors,</div> <div>Preparing qualified linguistic, literary and educational staff for research and<br/>teaching in various educational institutions, especially at the primary level.</div> | Course objectives   |

|   |   |                       |   |          |           |
|---|---|-----------------------|---|----------|-----------|
|   | Raising a generation that cares about its nation's intellectual and literary heritage   |                       |   |          |           |
|   | Working to preserve the eloquence of the Arabic language  |                       |   |          |           |
|   | Enriching libraries with research and studies by providing serious university theses.   |                       |   |          |           |
|   | Meeting the needs of universities, research centers, and the Ministry of Education for linguistic, literary, and educational specializations. |                       |   |          |           |
|   | Introducing students to the Arabic heritage of language and literature, as well as proper educational curricula.                              |                       |   |          |           |
| 1. Teaching and learning strategies   |   |                       |   |          |           |
| 1. In-person lectures in classrooms.<br>2. Discussion style, surprise exams and skill development methods.<br>3. Asking intellectual questions or holding a competition between students, stimulating creative thinking and providing clear and quick answers to the problems raised. |   |                       |   | Strategy |           |
| 4. Course structure   |   |                       |   |          |           |
| Evaluation method   | Learning method   | Name of unit or topic | Required learning outcomes                            | watches  | week      |
| In-person semester and daily exams  | In-person lectures  | The word              | The student is able to understand the given material. | 1        | the first |

|   |                           |                                |  |          |                   |
|---|---------------------------|--------------------------------|--|----------|-------------------|
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>Names</b>                   | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>the second</b> |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>Name tags</b>               | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>the third</b>  |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>verbs</b>                   | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>Fourth</b>     |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>Verb signs</b>              | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>Fifth</b>      |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>Letters and their types</b> | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>Sixth</b>      |

|   |                           |                         |  |   |            |
|---|---------------------------|-------------------------|--|---|------------|
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Knowledge               | <b>The student is able to understand the given material.</b> | 1 | Seventh    |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Known by AI             | <b>The student is able to understand the given material.</b> | 1 | The eighth |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Plurals and their types | <b>The student is able to understand the given material.</b> | 1 | Ninth      |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Sound masculine plural  | <b>The student is able to understand the given material.</b> | 1 | tenth      |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Sound feminine plural   | <b>The student is able to understand the given material.</b> | 1 | eleventh   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | plural of broken        | <b>The student is</b>  | 1 | twelfth    |

|                                    |                    |                                     |   |   |             |
|------------------------------------|--------------------|-------------------------------------|---|---|-------------|
|                                    |                    |                                     | able to understand the given material.                |   |             |
| In-person semester and daily exams | In-person lectures | Plural of few                       | The student is able to understand the given material. | 1 | thirteenth  |
| In-person semester and daily exams | In-person lectures | Pluralism                           | The student is able to understand the given material. | 1 | fourteenth  |
| In-person semester and daily exams | In-person lectures | The dual and its inflectional signs | The student is able to understand the given material. | 1 | fifteenth   |
| In-person semester and daily exams | In-person lectures | Doors of the present tense verb     | The student is able to understand the given material. | 1 | sixteenth   |
| In-person semester and daily exams | In-person lectures | Triliteral and quadriliteral verbs  | The student is able to understand                     | 1 | seventeenth |



|                                    |                    |   |   |   |               |
|------------------------------------|--------------------|---|---|---|---------------|
|                                    |                    |   | the given material.                                   |   |               |
| In-person semester and daily exams | In-person lectures | Verb with one or two letters                        | The student is able to understand the given material. | 1 | eighteenth    |
| In-person semester and daily exams | In-person lectures | Minor and major qalqalah letters                    | The student is able to understand the given material. | 1 | nineteenth    |
| In-person semester and daily exams | In-person lectures | The defective, the defective, and the extended noun | The student is able to understand the given material. | 1 | Twenty        |
| In-person semester and daily exams | In-person lectures | Dictation   | The student is able to understand the given material. | 1 | twenty-first  |
| In-person semester and daily exams | In-person lectures | Hamzat al-Wasl                                      | The student is able to understand the given material. | 1 | twenty-second |

|   |                           |                            |   |   |                       |
|---|---------------------------|----------------------------|---|---|-----------------------|
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Hamzat al-Qata'            | The student is able to understand the given material. | 1 | <b>twenty-third</b>   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | The letters Dad and Tha    | The student is able to understand the given material. | 1 | <b>twenty-fourth</b>  |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Drawing the hamza          | The student is able to understand the given material. | 1 | <b>twenty-fifth</b>   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | drawing of the letter alif | The student is able to understand the given material. | 1 | <b>twenty-sixth</b>   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Arabic calligraphy         | The student is able to understand the given material. | 1 | <b>twenty-seventh</b> |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Types of Arabic fonts      | The student is  | 1 | <b>twenty-eighth</b>  |

|  |                    |                             |   |   |              |
|--|--------------------|-----------------------------|---|---|--------------|
|  |                    |                             | able to understand the given material.                |   |              |
| In-person semester and daily exams   | In-person lectures | A poem of optimism and hope | The student is able to understand the given material. | 1 | twenty-ninth |
| In-person semester and daily exams   | In-person lectures | Strangers Poem              | The student is able to understand the given material. | 1 | thirty       |
| 5. Course Evaluation   |                    |                             |   |   |              |
| * Semi-daily and monthly tests<br>And surprise exams.<br>Daily classroom participation   |                    |                             |   |   |              |
| 6. Learning and teaching resources   |                    |                             |   |   |              |
| Arabic Language Education and Skills, Dr. Ahmed Ayoub Gerges<br>Arabic Grammar and its Application - Dr. Ahmed Shalaby<br><br>Arabic Grammar by Abdul Latif Al-Saidi |                    |                             | Required textbooks (methodology if any)               |   |              |

|   |  |
|---|--|
| Study of linguistic sound, Dr. Ahmed Mukhtar Omar   |  |
| The Complete Poetic Works of Ibrahim Touqan<br>Arabic calligraphy: its origins and development, Dr. Adel Al-Alusi | Main references (sources)  |
|   | Recommended supporting books and references (scientific journals, reports, etc.) |
|   | Electronic references, websites  |

## Course Description

|  |   |   |  |                                    |  |
|--|---|---|--|------------------------------------|--|
| 1. Course Title : Developmental and Educational Psychology   |   |   |  |                                    |  |
| 2. Course Code: Developmental and Educational Psychology   |   |   |  |                                    |  |
| 3. Semester / Year : Yearly  |   |   |  |                                    |  |
| 4. Date of preparation of this description : 9/2/2025  |   |   |  |                                    |  |
| 5. Available Forms of Attendance: Daily  |   |   |  |                                    |  |
| 6. Number of credit hours (total) / number of units (total) (60) hours Total / Number of units (4) units |   |   |  |                                    |  |
| 7. Course administrator's name (if more than one name)   |   |   |  |                                    |  |
| Name: Eng. Shahd Abbas Oraibi LALean:  |   |   |  |                                    |  |
| 8. Course Objectives   |   |   |  |                                    |  |
| Course Objectives  | That students be able to study human behavior from birth to the end of adolescence through the successive stages of growth in different manifestations (physical, mental, emotional and emotional) with the study of educational psychology as a field of psychology, which is also concerned with the study of human behavior in educational situations. |   |  |                                    |  |
| 9. Teaching and Learning Strategies  |   |   |  |                                    |  |
| Strategy   |   | <ul style="list-style-type: none"><li>• Cooperative Learning Strategy</li><li>• Problem Solving Strategy</li><li>• Brainstorming strategy</li></ul> |  |                                    |  |
| 10. Course Structure   |   |   |  |                                    |  |
| The week   | Hours   | Required Learning Outcomes  | Unit or subject name   | Learning method                    | Evaluation method                          |
| 1  | 2   | To know the concept of psychology and its types and the importance of theoretical and applied psychology  | The concept of developmental psychology – its types and its theoretical and applied importance | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 2  | 2   | To be able to know the laws of the same growth and how to relate them to each other   | General laws of growth   | resentation, ecture and discussion | dent evaluation the daily and written exam |

|    |   |   |  |                                    |  |
|----|---|---|--|------------------------------------|--|
| 3  | 2 | <b>To learn the stages of growth in all its manifestations</b>  | <b>Stages of growth in all its manifestations and areas of growth</b>                            | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 4  | 2 | <b>To identify genetic and environmental factors and how to link them with genetic</b>                      | <b>Factors affecting growth (genetic factors, environmental factors)</b>                         | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 5  | 2 | <b>Learn where the glands in the body</b>   | <b>Endocrine glands definition, importance in regulating growth and behavior and their types</b> | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 6  | 2 | <b>To know the concept of childhood</b>   | <b>Childhood (definition, stages and areas of development)</b>                                   | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 7  | 2 | <b>To know the manifestations of physical and emotional growth</b>  | <b>Physical and emotional growth</b>   | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 8  | 2 | <b>To know the manifestations of social growth</b>  | <b>Social growth</b>   | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 9  | 2 | <b>To know the manifestations of language development</b>   | <b>Language development</b>  | sentation, lectur discussion       | dent evaluation the daily and written exam |
| 10 | 2 | <b>To know the manifestations of mental development</b>   | <b>Mental (cognitive) development</b>  | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 11 | 2 | <b>To know the concept of socialization and what is the role of family and friends in upbringing</b>        | <b>The role of social institutions in socialization (family, friends)</b>                        | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 12 | 2 | <b>To know the role of the school and the means of communication in the age of technology in upbringing</b> | <b>The role of social institutions in socialization (school, means of communication)</b>         | resentation, ecture and discussion | dent evaluation the daily and written exam |

|    |   |   |  |                                    |  |
|----|---|---|--|------------------------------------|--|
| 13 | 2 | <b>To know the concept of adolescence and the difference between it and puberty and to know the three stages of adolescence and the manifestations of growth in early adolescence</b> | <b>Adolescence definition – stages – early adolescence (physical manifestations – emotional mental development – social development)</b>                         | resentation, ecture and discussion | Student evaluation in the daily and written exam |
| 14 | 2 | <b>To introduce the student to the concept of educational psychology</b>  | <b>The concept of educational psychology and its importance to the educational process and the importance of educational psychology for the teacher</b>          | resentation, ecture and discussion | dent evaluation the daily and written exam       |
| 15 | 2 | <b>To familiarize the student with the concept of educational objectives</b>  | <b>The concept of educational goals, sources of derivation, levels, specifications, formulation of behavioral goals, and classification of educational goals</b> | resentation, ecture and discussion | dent evaluation the daily and written exam       |
| 16 | 2 | <b>To introduce the student to models in educational psychology</b>   | <b>Factors affecting the effectiveness of the educational process according to the Clausmeyer and Codewin model</b>  | resentation, ecture and discussion | dent evaluation the daily and written exam       |
| 17 | 2 | <b>To familiarize the student with research methods in psychology and educational psychology</b>  | <b>The concept of scientific research methodology The most important methods and methods used in</b>   | resentation, ecture and discussion | dent evaluation the daily and written exam       |

|    |   |   |   |                                    |  |
|----|---|---|---|------------------------------------|--|
|    |   |   | <b>general psychology and educational psychology</b>                              |                                    |  |
| 18 | 2 | <b>The student should be introduced to the descriptive approach</b>   | <b>The concept of the descriptive approach<br/>Descriptive approach methods</b>   | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 19 | 2 | <b>The student should be introduced to the experimental method</b>  | <b>The concept of the experimental approach and experimental method variables</b> | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 20 | 2 | <b>The student should be familiar with the clinical or clinical curriculum</b>  | <b>The concept of the clinical curriculum</b>                                     | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 21 | 2 | <b>To introduce the student to the concept of behavior</b>  | <b>The concept of behavior and the factors affecting behavior</b>                 | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 22 | 2 | <b>To introduce the student to the concept of learning</b>  | <b>The concept of learning and factors affecting learning</b>                     | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 23 | 2 | <b>To introduce the student to the concept of motivation and the classification of motives</b>  | <b>The concept of motivation and the classification of motives</b>                | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 24 | 2 | <b>The student should recognize the role of motivation in learning and the student should recognize the educational functions of motivation</b> | <b>The role of motivation in learning, educational functions of motivation</b>    | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 25 | 2 | <b>To identify the strategies for stimulating students' motivation towards learning To identify the</b>   | <b>Strategies for stimulating students' motivation towards learning,</b>          | resentation, ecture and discussion | dent evaluation the daily and written exam |



|   |   |   |   |                                    |  |
|---|---|---|---|------------------------------------|--|
|   |   | <b>hierarchical organization of needs</b>                                       | <b>hierarchical organization of motivation (Maslow)</b>   |                                    |  |
| 26  | 2 | <b>To introduce the student to learning theories</b>                            | <b>Pavlov's classical conditioning theory and Skinner's procedural learning theory</b>  | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 27  | 2 | <b>The student should understand the transmission of the learning effect</b>    | <b>The concept of the transmission of the impact of learning and its importance, types and theories, teaching concepts</b>        | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 28  | 2 | <b>The student should understand the feedback</b>                               | <b>The concept of feedback, its importance, functions, types, feedback and programmed education</b>                               | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 29  | 2 | <b>The student should understand the distribution of individual differences</b> | <b>The concept of individual differences The importance of studying individual differences</b>                                    | resentation, ecture and discussion | dent evaluation the daily and written exam |
| 30  | 2 | student should understand the reasons that ad to individual differences         | Causes of individual differences  | resentation, ecture and discussion | dent evaluation the daily and written exam |
| <b>11.Course Evaluation</b>   |   |   |   |                                    |  |
| Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily, oral, monthly, written exams, reports .... etc |   |   |   |                                    |  |
| <b>12Learning and Teaching Resources</b>  |   |   |   |                                    |  |
| Required textbooks (methodology, if any)  |   |   | <b>- Jamal Hussein (1983):</b><br><b>Childhood and Adolescence</b><br><b>Psychology, Baghdad,</b><br><b>University of Baghdad</b> |                                    |  |

|  |   |
|--|---|
|  | <p><b>Arifj, Sami (1993): Evolutionary Psychology, Jordan, Amman, Majdalawi House</b></p> <p><b>– Alwan, Fadia (2003): Introduction to Evolutionary Psychology, Cairo, Arab Book Library House</b></p>  |
| Main references (sources)  | <p><b>– Al-Qaisi Raouf Mahmoud (2008): Educational Psychology, Dar Dijla, Jordan.</b></p> <p><b>– Al-Moussawi, Abbas Noah Suleiman Muhammad (2015): Educational Psychology – Concepts and Principles, 1st Edition, Dar Al-Radwan.</b></p> <p><b>–Mansour, Abdul Majeed Sayed and others (2015): Educational Psychology, 9th Edition, Al-Abikawi, Riyadh</b></p> |
| Recommended books and references (scientific journals, reports...) |   |
| Electronic References, Websites                                    |   |

## Course Description Form

|   |  |
|---|--|
| .1 Course name  |  |
| Data Structures and Algorithms  |  |
| .23 Course Code   |  |
|   |  |
| .2 semester/year  |  |
| the first The second /2025-2024   |  |
| .3 Date this description was prepared   |  |
| 2025/3/28   |  |
| .4 Available attendance   |  |
| weekly  |  |
| .5 Study hours (total) / number of units (total)  |  |
| .6 Course instructor name if more From a name that is mentioned   |  |
| Name: Karar Ali Hussein   | Email: karar.ah@uomisan.edu.iq   |
| .7 Course objectives  |  |
| <ol style="list-style-type: none"> <li>1. Basic Data Concepts               <ul style="list-style-type: none"> <li>○ Data definition and types.</li> <li>○ How to organize and store it.</li> </ul> </li> <li>2. Data Management System               <ul style="list-style-type: none"> <li>○ Database management systems(DBMS).</li> <li>○ Handling data effectively.</li> </ul> </li> <li>3. The concept of computing               <ul style="list-style-type: none"> <li>○ Understanding computer systems.</li> <li>○ Basic principles of computer operation.</li> </ul> </li> <li>4. Concepts related to classifier learning (classified machine learning)               <ul style="list-style-type: none"> <li>○ Data classification.</li> <li>○ Using algorithms to classify inputs.</li> </ul> </li> <li>5. Linear concepts               <ul style="list-style-type: none"> <li>○ Examples: lists, arrays, stacks(Stacks), queues (Queues).</li> </ul> </li> <li>6. Nonlinear concepts               <ul style="list-style-type: none"> <li>○ Example: trees(Trees), Graphs.</li> </ul> </li> <li>7. Principles of linked lists               <ul style="list-style-type: none"> <li>○ Single, double, and circular lists.</li> </ul> </li> <li>8. Tree diagrams and how to represent them               <ul style="list-style-type: none"> <li>○ Information hierarchy.</li> </ul> </li> </ol> | <div style="border: 1px solid black; height: 350px; width: 100%;"></div> |

## Course Description Form

|  |                       |                            |   |                                       |      |
|--|-----------------------|----------------------------|---|---------------------------------------|------|
| <ul style="list-style-type: none"> <li>○ Applications of trees in databases and search engines.</li> </ul> <p>9. programming</p> <ul style="list-style-type: none"> <li>○ General concept of programming.</li> <li>○ Using algorithms and data structures in programming.</li> </ul> |                       |                            |   |                                       |      |
| <b>.8Teaching and learning strategies</b>  |                       |                            |   |                                       |      |
| <ul style="list-style-type: none"> <li>• Theoretical lecture</li> <li>• roadQuestionsand discussion</li> <li>• ExamsDaily and monthly</li> <li>• Practical laboratories</li> </ul>   | Strategy              |                            |   |                                       |      |
| <b>.9Course structure</b>  |                       |                            |   |                                       |      |
| Evaluation<br>method   | Learning<br>method    | nameUnit orthe<br>topic    | Learning<br>outcomes<br>Required  | watches                               | week |
| Weekly exams<br>Monthly and<br>laboratory reports  | Presentation +<br>Lab | Data Structures<br>Concept | Show<br>different<br>types of<br>data<br>structures                         | 4<br><br>Theoretical<br>+ 4 Practical | 1+2  |
| Weekly exams<br>Monthly and<br>laboratory reports  | Presentation +<br>Lab | Matrices                   | Understand<br>the concept<br>of matrices<br>and how to<br>represent<br>them | 4<br><br>Theoretical<br>+ 4 Practical | 3+4  |

## Course Description Form

|   |                       |  |   |                                       |       |
|---|-----------------------|--|---|---------------------------------------|-------|
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | Determine array<br>storage locations               | Matrix<br>storage<br>locations                                  | 4<br><br>Theoretical<br>+ 4 Practical | 6+5   |
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | queue and stack                                    | The concept<br>of queue<br>and stack                            | 4<br><br>Theoretical<br>+ 4 Practical | 7+8   |
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | Stack activities                                   | The most<br>important<br>events<br>taking place<br>on the stack | 4<br><br>Theoretical<br>+ 4 Practical | 9+10  |
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | Parade activities                                  | Concept of<br>indicators  | 4<br><br>Theoretical<br>+ 4 Practical | 11+12 |
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | Linked lists                                       | The concept<br>of linked<br>lists                               | 4<br><br>Theoretical<br>+ 4 Practical | 13+14 |
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | Linked list<br>operations                          | Operations<br>applied to<br>linked lists                        | 4<br><br>Theoretical<br>+ 4 Practical | 15+16 |
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | Non-linear lists                                   | Charts and<br>trees   | 4<br><br>Theoretical<br>+ 4 Practical | 17+18 |
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | Types of charts                                    | Types of<br>charts and<br>methods of<br>representing<br>them    | 4<br><br>Theoretical<br>+ 4 Practical | 19+20 |
| Weekly exams<br>Monthly and<br>laboratory reports | Presentation +<br>Lab | Types of trees and<br>ways of<br>representing them | Types of<br>trees   | 4<br><br>Theoretical<br>+ 4 Practical | 21+22 |

## Course Description Form

|   |                       |   |  |                                       |       |
|---|-----------------------|---|--|---------------------------------------|-------|
| Weekly exams<br>Monthly and<br>laboratory reports   | Presentation +<br>Lab | Types of binary<br>trees and methods<br>of representing<br>them         | binary trees                           | 4<br><br>Theoretical<br>+ 4 Practical | 23+24 |
| Weekly exams<br>Monthly and<br>laboratory reports   | Presentation +<br>Lab | Search and sorting<br>methods and their<br>importance in<br>programming | Search and<br>sort                     | 4<br><br>Theoretical<br>+ 4 Practical | 25+26 |
| Weekly exams<br>Monthly and<br>laboratory reports   | Presentation +<br>Lab | Introduction to<br>Graph Data<br>Structures                             | Chart                                  | 4<br><br>Theoretical<br>+ 4 Practical | 27+28 |
| Weekly exams<br>Monthly and<br>laboratory reports   | Presentation +<br>Lab | Algorithm design<br>and analysis  | Algorithms                             | 4<br><br>Theoretical<br>+ 4 Practical | 29+30 |
| .10Course Evaluation  |                       |   |  |                                       |       |
| The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation.and examsDaily,<br><br>oral, and monthly<br><br>Editorial, reports...etc. |                       |   |  |                                       |       |
| .11Learning and teaching resources  |                       |   |  |                                       |       |
| nothing   |                       |   | Required textbooks(Methodology if any) |                                       |       |
| Structured programming languageC++ ;Data Structures<br><br>Basics   |                       |   | Main references (Sources )             |                                       |       |
|   |                       |   | Electronic references, websites        |                                       |       |

# Course Description Form

|  |                   |
|--|-------------------|
| .22 Course Name  |                   |
| Object-oriented programming  |                   |
| .23 Course Code  |                   |
| CsOo219  |                   |
| .24 semester/year  |                   |
| the firstThe second / 2024   |                   |
| .25 Date this description was prepared   |                   |
| 2025/2/18  |                   |
| 26. Available forms of attendance  |                   |
| weekly   |                   |
| 27. Number of study hours (total) / Number of units (total)  |                   |
| .28 Name of the course administratorif moreFrom a name that is mentioned   |                   |
| name:. Abbas Abdul Hussein Haddad                      Email: abbas@uomisan.edu.iq   |                   |
| 29. Course objectives  |                   |
| <ul style="list-style-type: none"> <li>• To make students understand the principles of object-oriented programming.</li> <li>• Understand some data structure concepts such as strings.. strings</li> <li>• Understand subroutines and integrate them with object-oriented programming concepts.</li> <li>• Implementing algorithms used to solve programming problems using classes.classes</li> <li>• Understand and apply object-oriented programming concepts such as classes, entities, and encapsulation.</li> <li>• And heredity in its various types and forms.</li> </ul> <p>A.GoalsCognitive:</p> <ul style="list-style-type: none"> <li>• Object-oriented programming foundations</li> <li>• The concept of algorithms</li> <li>• Information needed to write programs</li> </ul> <p>B. Skill objectives:</p> <ul style="list-style-type: none"> <li>• Comparison</li> <li>• Evaluation</li> <li>• Criticism</li> <li>• Application</li> </ul> <p>C. Emotional and value-based goals:</p> <ul style="list-style-type: none"> <li>• Appreciating the greatness of the Creator in making man a being who cares about the scientific aspect.</li> <li>• Appreciating the efforts of scientists in the study of computer science.</li> <li>• Appreciating the efforts of researchersAnd the studentsIn a statement of the importance of programs and software.</li> </ul> | Course objectives |
| .30 Teaching and Learning Strategies   |                   |
| <ul style="list-style-type: none"> <li>• Theoretical lecture</li> <li>• roadQuestionsand discussion</li> </ul>   | Strategy          |

# Course Description Form

|   |                    |  |   |                             |      |
|---|--------------------|--|---|-----------------------------|------|
| <ul style="list-style-type: none"><li>ExamsDaily and monthly</li><li>Practical laboratories</li></ul> |                    |  |   |                             |      |
| .31 Course Structure  |                    |  |   |                             |      |
| Evaluation method   | Learning method    | nameUnit or the topic                          | Learning outcomes Required                  | watches                     | week |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | Definition of object-oriented programming      | Introduction to Object-Oriented Programming | 2 Theoretical + 2 Practical | 1    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | Subprograms                                    | Subprograms                                 | 2 Theoretical + 2 Practical | 2    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | History and types of programming languages     | Methods and types of programming languages  | 2 Theoretical + 2 Practical | 3    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | Languagesunstructured                          | Methods and types of programming languages  | 2 Theoretical + 2 Practical | 4    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | Modular languages                              | Methods and types of programming languages  | 2 Theoretical + 2 Practical | 5    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | Entity programming                             | Methods and types of programming languages  | 2 Theoretical + 2 Practical | 6    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | RecognitionUnderstanding chainssymbolism       | chainssymbolism                             | 2 Theoretical + 2 Practical | 7    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | Understanding categoriesand entities           | CategoriesandEntities                       | 2 Theoretical + 2 Practical | 8    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | How to create entities                         | Creating entities                           | 2 Theoretical + 2 Practical | 9    |
| Weekly exams<br>Monthly and laboratory reports  | Presentation + Lab | Understanding packaging and access to category | Packaging and access to the category        | 2 Theoretical + 2 Practical | 10   |



# Course Description Form

|  |                    |  |                                      |                             |    |
|--|--------------------|--|--------------------------------------|-----------------------------|----|
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding packaging and access to category | Packaging and access to the category | 2 Theoretical + 2 Practical | 11 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding Domain Operations                | Scope processscope                   | 2 Theoretical + 2 Practical | 12 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding and writing constructions        | The buildings                        | 2 Theoretical + 2 Practical | 13 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding and writing demolishers          | demolishers                          | 2 Theoretical + 2 Practical | 14 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding the concept of genetics          | heredity                             | 2 Theoretical + 2 Practical | 15 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding single-stranded inheritance      | single inheritance                   | 2 Theoretical + 2 Practical | 16 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Applications of single-stranded inheritance    | single inheritance                   | 2 Theoretical + 2 Practical | 17 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Inheritance and protected elements             | single inheritance                   | 2 Theoretical + 2 Practical | 18 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding complex inheritance              | compound inheritance                 | 2 Theoretical + 2 Practical | 19 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding multilevel inheritance           | multilevel inheritance               | 2 Theoretical + 2 Practical | 20 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding hybrid genetics                  | hybrid inheritance                   | 2 Theoretical + 2 Practical | 21 |
| Weekly exams                                   | Presentation + Lab | Understanding and writing friendly functions   | Friendly functions                   | 2 Theoretical               | 22 |

# Course Description Form

|  |                    |   |                                      |                                |    |
|--|--------------------|---|--------------------------------------|--------------------------------|----|
| Monthly and laboratory reports                 |                    |   |                                      | + 2 Practical                  |    |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Recognizing Function Overloading                      | Function overloading                 | 2 Theoretical<br>+ 2 Practical | 23 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Recognizing process overload                          | Process overload                     | 2 Theoretical<br>+ 2 Practical | 24 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding and Writing Entity Pointers             | Pointers to entities                 | 2 Theoretical<br>+ 2 Practical | 25 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding pointers to the child entity            | Pointers to entities                 | 2 Theoretical<br>+ 2 Practical | 26 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding examples and applications of indicators | Applications of pointers to entities | 2 Theoretical<br>+ 2 Practical | 27 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding the entity indicator matrix             | Entity Indicator Matrix              | 2 Theoretical<br>+ 2 Practical | 28 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Writing virtual functions                             | Virtual functions                    | 2 Theoretical<br>+ 2 Practical | 29 |
| Weekly exams<br>Monthly and laboratory reports | Presentation + Lab | Understanding the abstract class                      | Data abstraction                     | 2 Theoretical<br>+ 2 Practical | 30 |

## .32 Course Evaluation

The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation.and examsDaily, oral, and monthly Editorial, reports...etc.

## .33 Learning and teaching resources

|  |  |
|--|--|
| nothing  | Required textbooks(Methodology if any)                                       |
| Robert Lafore, Object Oriented Programming in C++, 2002. | Main references (Sources )   |
| Herber, Schildt, C++: The complete Reference, 1998.      | Recommended supporting books and references(Magazinescientific, Reports....) |
| /channel/com.youtube.www UC3je0oZ9v0_AaoYm6ap_Xug        | Electronic references, websites  |

## Course Description Form

Object-Oriented Programming Course Development Plan:

-1 Adding various examples of subprograms and dealing with several types of Transactions Functions that serve

Principles of object-oriented programming.

-2 Add the topic of the friendly class to the topic of friendly functions and implement various examples in this regard.

-3 Dealing with overloading of functions and operations from during Friendly functions.

-4 Working with constructors and destructors in programs that apply the concept of inheritance.

## Course description form

|   |                                |
|---|--------------------------------|
| 1. Course Name: Micro Processors  |                                |
| 2. Course Code: 213CsMp   |                                |
| 2. Season/Year: Yearly  |                                |
| 3. Date of preparation of this description  |                                |
| 4. Forms of attendance available daily: Weekly Lectures   |                                |
| 5. Number of study hours (total) / Number of units (total) 60 Theoretical 60 Practical:<br>60 (1 theoretical hour + 2 practical hours) per week / 6 units   |                                |
| 6. The name of the course leader (if more than one name is mentioned)   |                                |
| Name: Asst. Lecturer Mohammed Hamdan Yousif<br>Email: mohammed.h.y@uomisan.edu.iq   |                                |
| 8. Course objectives  |                                |
| <p><b>General Objectives</b><br/> Teach students the theoretical fundamentals of processor architecture.<br/> Teach students how the processor operates and how it interacts and connects with other computer components.<br/> Teach students programming using assembly language.</p> <hr/> <p><b>Cognitive Objectives</b><br/> Enable students to understand the architecture of the 8086 processor in detail.<br/> Help students recognize assembly language instructions for the processor.<br/> Help students understand programming in assembly language.<br/> Help students understand how the processor works in general, and the 8086 specifically.</p> <hr/> <p><b>Skill-Based Objectives</b><br/> Equip students with the skill of using the EMU 8086 software.<br/> Develop students' skills in assembly language programming.<br/> Develop the skill of writing interrupt instructions to handle input/output devices.<br/> Ensure students can practically implement what they have learned theoretically in the lab.</p> <hr/> <p><b>Effective (Value-Based) Objectives</b><br/> Instill habits of precision, accuracy, and organization when writing assembly programs.<br/> Help students realize the extent of development and advancement across different generations of microprocessors.<br/> Make students aware of the impact of processor development on the speed of scientific and technological progress.<br/> Appreciate the importance of using microprocessors.</p> |                                |
| 9. Teaching and learning strategies   |                                |
|   | Modified Lecture<br>Discussion |

|                                   |       | Brainstorming<br>Practical Application in Laboratories                      |  |                                       |      |
|-----------------------------------|-------|---|--|---------------------------------------|------|
| 10. Course structure              |       |   |  |                                       |      |
| Evaluation method                 | hours | Required learning outcomes  | Name of the unit or topic              | Learning method                       | week |
| Daily Exams + Monthly Assignments | 2+2   | Teach students processor architecture                                       | Cpu architecture                       | Lecture + Discussion (Examples) + Lab | .1   |
| Daily Exams + Monthly Assignments | 2+2   | Teach students bus types in computers and memory types and their properties | Explain the bus system and memory type | Lecture + Discussion (Examples) + Lab | .2   |
| Daily Exams + Monthly Assignments | 2+2   | Introduction to the architecture and characteristics of the 8086 processor  | 8086 mp architecture                   | Lecture + Discussion (Examples) + Lab | .3   |
| Daily Exams + Monthly Assignments | 2+2   | Introduce students to processor components, including the execution unit    | Execution unit                         | Lecture + Discussion (Examples) + Lab | .4   |
| Daily Exams + Monthly Assignments | 2+2   | Introduce students to the flag register                                     | Flags register                         | Lecture + Discussion (Examples) + Lab | .5   |
| Daily Exams + Monthly Assignments | 2+2   | Introduction to the bus interface unit in processor architecture            | Bus interface unit                     | Lecture + Discussion (Examples) + Lab | .6   |
| Daily Exams + Monthly Assignments | 2+2   | Explain addressing modes  | Addressing modes                       | Lecture + Discussion (Examples) + Lab | .7   |
| Daily Exams + Monthly Assignments | 2+2   | Introduce arithmetic instructions   | Addressing modes                       | Lecture + Discussion (Examples) + Lab | .8   |
| Daily Exams + Monthly             | 2+2   | Introduce arithmetic instructions   | Arithmetic instruction                 | Lecture + Discussion (Examples) + Lab | .9   |

|  |     |   |                                 |  |     |
|--|-----|---|---------------------------------|--|-----|
| Assignment<br>s                                |     |   |                                 |  |     |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduce arithmetic<br>instructions                      | Arithmetic<br>instruction       | Lecture + Discussion<br>(Examples) + Lab | .10 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduce arithmetic<br>instructions                      | Arithmetic<br>instruction       | Lecture + Discussion<br>(Examples) + Lab | .11 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduce logic<br>instructions                           | Logic instruction               | Lecture + Discussion<br>(Examples) + Lab | .12 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduce shift and<br>rotate instructions                | Shift and rotate<br>instruction | Lecture + Discussion<br>(Examples) + Lab | .13 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduce shift and<br>rotate instructions                | Shift and rotate<br>instruction | Lecture + Discussion<br>(Examples) + Lab | .14 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduce control<br>transfer instructions                | Transfer control<br>instruction | Lecture + Discussion<br>(Examples) + Lab | .15 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduce control<br>transfer instructions                | Transfer control<br>instruction | Lecture + Discussion<br>(Examples) + Lab | .16 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Explain and handle<br>block memory<br>sequences           | Block of mem<br>deals           | Lecture + Discussion<br>(Examples) + Lab | .17 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Teach students<br>programming with<br>string instructions | string<br>instruction           | Lecture + Discussion<br>(Examples) + Lab | .18 |
| Daily<br>Exams +<br>Monthly                    | 2+2 | Teach students<br>programming with<br>string instructions | string<br>instruction           | Lecture + Discussion<br>(Examples) + Lab | .19 |

|  |     |   |                      |  |     |
|--|-----|---|----------------------|--|-----|
| Assignment<br>s                                |     |   |                      |  |     |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Explain the stack   | stack                | Lecture + Discussion<br>(Examples) + Lab | .20 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduce interrupts  | interrupt            | Lecture + Discussion<br>(Examples) + Lab | .21 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Teach students the<br>types of interrupts   | Interrupt type       | Lecture + Discussion<br>(Examples) + Lab | .22 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Explain how to<br>address<br>input/output<br>devices                              | i/o port             | Lecture + Discussion<br>(Examples) + Lab | .23 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Teach students how<br>to define and work<br>with arrays and<br>store data in them | array                | Lecture + Discussion<br>(Examples) + Lab | .24 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Teach students how<br>to define and work<br>with arrays and<br>store data in them | array                | Lecture + Discussion<br>(Examples) + Lab | .25 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Teach students how<br>to define and work<br>with arrays and<br>store data in them | array                | Lecture + Discussion<br>(Examples) + Lab | .26 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 | Introduction to<br>Pentium  | procedure            | Lecture + Discussion<br>(Examples) + Lab | .27 |
| Daily<br>Exams +<br>Monthly<br>Assignment<br>s | 2+2 |   | Review of<br>Pentium | Lecture + Discussion<br>(Examples) + Lab | .28 |
| Daily<br>Exams +<br>Monthly                    | 2+2 | General Review  |                      | Lecture + Discussion<br>(Examples) + Lab | .29 |

|   |   |                |  |                                       |     |
|---|---|----------------|--|---------------------------------------|-----|
| Assignments   |   |                |  |                                       |     |
| Daily Exams + Monthly Assignments   | 2+2   | General Review |  | Lecture + Discussion (Examples) + Lab | .30 |
| 11. Course evaluation   |   |                |  |                                       |     |
| 30 marks for the midterm and daily exams, 10 marks for the midterm and daily practical exams, and 60 for the final exam.  |   |                |  |                                       |     |
| 12. Learning and teaching resources   |   |                |  |                                       |     |
|   | Richard Blum, professional assembly Language, Wiley Publishing, Inc., 2005.<br>THE INTEL MICROPROCESSORS<br>8086/8088,80186/80188,80286,80386,<br>80486, Pentium, Pentium Pro Processor,<br>Pentium II, Pentium III, Pentium 4, and Core2<br>With 64-bit Extensions<br>Architecture, Programming, and Interfacing<br>Eighth Edition<br>BARRY B. BREY 2009<br>Walter A. Triebel," The 8086 microprocessor architecture, software, and interfacing techniques", prentice hall, 1985 |                |  |                                       |     |
| Course Development Plan   |   |                |  |                                       |     |
| Make a comparison between the processor and a more advanced processor to understand how processors have evolved<br>Add more details about microprocessor pins<br>Explore the development of instructions in a more advanced processor |   |                |  |                                       |     |



## Course description form

### Course description

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description.

|                                      |   |
|--------------------------------------|---|
| 1-Educational institution            | University of Misan / College of Education  |
| 2-Scientific Department / Stage      | Department of Computer science / Second level   |
| 3-Course name/code                   | Computer science  |
| 4-Available attendance forms         | Attendance hours are according to the schedule announced in Class                                   |
| 5-Academic system                    | Annual course   |
| 6-Number of study hours (total)      | 120hours '4 hours per week *30 per week   |
| 7-Date this description was prepared | 4/12/2024   |
| 8- Name:<br>Email:                   | Nabeel Mahdy Hadaad<br><a href="mailto:Nabeel.mahdy@uomisan.edu.iq">Nabeel.mahdy@uomisan.edu.iq</a> |

### 8. Course objectives

- 1- Distinguishing between students between database Data base technology has a great impact on the increasing use of computer
- 2- To qualify and train students on the database system in order to simplify and facilitate access to data through central control
- 3- To qualify and train students to create database tables in a design manner in order to analyze and create any system in the future.
- 4- Students' ability to analyze the system according to functions in order to create the drug system in the future.
- 5- Students learn to create Internet applications and link the Internet with other tables for the necessary data requirements.
- 6- Students are able to use SQL & Microsoft Access

|   |
|---|
|   |
|   |
| <b>9. Course outcomes and teaching, learning and evaluation methods</b>   |
| <p>A- Cognitive objectives</p> <ol style="list-style-type: none"> <li>1) The student on the concept of databases and their classifications</li> <li>2 The student using Microsoft Access and SQL</li> <li>3) The student applying the SQL program</li> <li>4) The student applying the Microsoft Access program.</li> <li>5) The student applying a program to create reports &amp; inquiries.</li> <li>6) Introducing the student to the methods of using ready-made tables for databases and their benefits.</li> </ol> |
| <p>B -The skills objectives of the course</p> <ol style="list-style-type: none"> <li>1) T students with how to use the computer.</li> <li>2) To provide students with how to use SQL installation and operating system.</li> <li>3) To provide students with how to use Microsoft Access 2016 programs.</li> <li>4) To provide students with the skill of creating and using reports.</li> </ol>  |
| <b>Teaching and learning methods</b>  |
| <p>In-person lectures.</p> <p>Discussion style.</p> <p>Auxiliary video lectures on the teacher's YouTube channel.</p>   |
| <b>Evaluation methods</b>   |
| <ol style="list-style-type: none"> <li>1) Daily Quiz and monthly attendance tests</li> <li>2) Assigning the student to academic tasks for which he will be rewarded</li> <li>3) Assigning the student to prepare reports on computer application topics</li> </ol>  |
| <b>General goals</b>  |
| <ol style="list-style-type: none"> <li>1-The student should show interest in the explanation the teacher provides of the subject.</li> <li>2-The student must have sufficient conviction about the importance of the material he is receiving.</li> <li>3-That the student is able to organize the data he has to solve mathematical problems.</li> <li>4-The student should be able to discuss and justify solutions to mathematics problems and suggest some other possible solutions to the problem.</li> </ol>        |
| <b>Teaching and learning methods</b>  |

- 1-Education using modern educational methods.
- 2-Teaching using competitions, which stimulate the spirit of enthusiasm among students.
- 3-Learning by making the student a teacher to enhance his self-confidence.
- 4-Learning through brainstorming among students.

**Evaluation methods**

1. The method of discussion and dialogue between the student and the teacher.
2. Observation method.
3. Attendance exams.

**Targeted skills:**

- 1-Using the acquired information in the field of life
- 2-Personal development through linking traditional education and e-learning.
- 3-Building the personality of a competent mathematics teacher who can transfer his experiences to students in the future.
- 4-Preparing the student scientifically and educationally according to solid scientific foundations.

| 11. Course vocabulary |         |  |  |                        |                           |
|-----------------------|---------|--|--|------------------------|---------------------------|
| Weeks                 | Hours   | Required learning outcomes                           | Name of the unit/topic   | Teaching method        | Evaluation method         |
| 1                     | 4 hours | The student is able to understand the given material | Database (DB)<br>Database Design and Data Redundancy                                       | Lecture and discussion | Quarterly and daily exams |
| 2                     | 4 hours | The student is able to understand the given material | Explain about Record, field, Table, Database   | Lecture and discussion | Quarterly and daily exams |
| 3                     | 4 hours | The student is able to understand the given material | Purpose of Database Systems: (Why DB?), Inconsistency can be avoided                       | Lecture and discussion | Quarterly and daily exams |
| 4                     | 4 hours | The student is able to understand the given material | -Redundancy can be reduced,<br>- Standards can be enforced ,<br>-Redundancy can be reduced | Lecture and discussion | Quarterly and daily exams |
| 5                     | 4 hours | The student is able to understand the given material | -Security restriction,<br>-Security restriction can be applied,<br>Database Admin          | Lecture and discussion | Quarterly and daily exams |
| 6                     | 4 hours | The student is able to understand the given material | - Data Integrity,<br>- Entity Integrity,<br>- Domain Integrity,<br>- Referential integrity | Lecture and discussion | Quarterly and daily exams |
| 7                     | 4 hours | The student is able to understand the given material | -Data Independence,<br>-Database Administrator DBA,<br>-Data Abstraction                   | Lecture and discussion | Quarterly and daily exams |
| 8                     | 4 hours | The student is able to understand the given material | -Database Schema,<br>-Physical Database Schema   | Lecture and discussion | Quarterly and daily exams |

|    |         |  |   |                        |                           |
|----|---------|--|---|------------------------|---------------------------|
|    |         |  | -Logical Database Schema  |                        |                           |
| 9  | 4 hours | The student is able to understand the given material | -Database Management System<br>-DBMS Overview<br>Characteristics s<br>Real-world entity                                     | Lecture and discussion | Quarterly and daily exams |
| 10 | 4 hours | The student is able to understand the given material | -Relation-based Tables<br>-Isolation of data and application<br>-Less redundancy<br>Consistency                             | Lecture and discussion | Quarterly and daily exams |
| 11 | 4 hours | The student is able to understand the given material | -Query Language<br>-ACID Properties, Multiuser&Concurrent Access,<br>-Multiple views.                                       | Lecture and discussion | Quarterly and daily exams |
| 12 | 4 hours | The student is able to understand the given material | -Kind of Users<br>-Administrators<br>-Designers<br>-End Users   | Lecture and discussion | Quarterly and daily exams |
| 13 | 4 hours | The student is able to understand the given material | -DBMS – Architecture<br>1-tier architecture<br>2-tier Architecture<br>3-tier Architecture                                   | Lecture and discussion | Quarterly and daily exams |
| 14 | 4 hours | The student is able to understand the given material | -Database (Data) Tier<br>-Application (Middle) Tier<br>-User (Presentation) Tier  | Lecture and discussion | Quarterly and daily exams |
| 15 | 4 hours | The student is able to understand the given material | -Entity-Relationship Model<br>-Entity-Relationship (ER)<br>-Entities and their attributes<br>-Relationships among entities. | Lecture and discussion | Quarterly and daily exams |

|    |         |  |  |                        |                           |
|----|---------|--|--|------------------------|---------------------------|
| 16 | 4 hours | The student is able to understand the given material | -Kind of Relationships<br>-One to one<br>-One to many<br>-Many to one<br>Many to many  | Lecture and discussion | Quarterly and daily exams |
| 17 | 4 hours | The student is able to understand the given material | -Primary key in DBMS<br>Foreign key in<br>-DBMS<br>-Composite key in DBMS<br>-Candidate Key in DBMS  | Lecture and discussion | Quarterly and daily exams |
| 18 | 4 hours | The student is able to understand the given material | -ER Diagram<br>-Data flow diagrams (DFDs),<br>-Multi-way relationship set R<br>-Convert the ER diagram into relational tables  | Lecture and discussion | Quarterly and daily exams |
| 19 | 4 hours | The student is able to understand the given material | -Normalization<br>Kind of Normalization<br>-First Normal Form (1NF).<br>-Second Normal Form (2NF).<br>-Third Normal Form (3NF)   | Lecture and discussion | Quarterly and daily exams |
| 20 | 4 hours | The student is able to understand the given material | -Normalization is used for mainly three purposes,<br>-Eliminating redundant (useless) data.<br>- Ensuring data dependencies make sense i.e data is logically stored.<br>-Simplifying | Lecture and discussion | Quarterly and daily exams |

|    |         |  |   |                        |                           |
|----|---------|--|---|------------------------|---------------------------|
|    |         |  | the process of insertion, deletion and updating DB.   |                        |                           |
| 21 | 4 hours | The student is able to understand the given material | -Problems without Normalization,<br>-Insertion Anomaly,<br>-Updating Anomaly<br>Deletion Anomaly                                | Lecture and discussion | Quarterly and daily exams |
| 22 | 4 hours | The student is able to understand the given material | -What is Partial Dependency (PD)<br>-Transitive Dependency (TD)<br>-1NF Dependency Diagram.<br>-2NF Removing partial dependency | Lecture and discussion | Quarterly and daily exams |
| 23 | 4 hours | The student is able to understand the given material | -Structure Query Language (SQL)<br>-Data Retrieval (SELECT):  | Lecture and discussion | Quarterly and daily exams |
| 24 | 4 hours | The student is able to understand the given material | Some operator used with WHERE condition   | Lecture and discussion | Quarterly and daily exams |
| 25 | 4 hours | The student is able to understand the given material | -System<br>-Computer system<br>-Information Technology (IT)<br>Information System   | Lecture and discussion | Quarterly and daily exams |
| 26 | 4 hours | The student is able to understand the given material | -Systems Analysis and Design<br>-Systems analysts<br>-Systems Development Methods   | Lecture and discussion | Quarterly and daily exams |

|    |         |  |   |                        |                           |
|----|---------|--|---|------------------------|---------------------------|
| 27 | 4 hours | The student is able to understand the given material | Structured Analysis<br>-Systems development life cycle (SDLC),<br>-Understand The Business  | Lecture and discussion | Quarterly and daily exams |
| 28 | 4 hours | The student is able to understand the given material | -Business process modelling<br>-Business Profile<br>Business Process  | Lecture and discussion | Quarterly and daily exams |
| 29 | 4 hours | The student is able to understand the given material | -Systems Development Life Cycle (SDLC<br>-Waterfall Model<br>-Planning phase.<br>-Analysis phase<br>-Design phase.                | Lecture and discussion | Quarterly and daily exams |
| 30 | 4 hours | The student is able to understand the given material | Implementation phase.<br>-Data Conversion Strategies (System Changeover):<br>-Operation, Support, Security, and Maintenance Phase | Lecture and discussion | Quarterly and daily exams |



| Helping sources   |  |
|---|--|
| Required prescribed books   | System Analysis & Database book (second edition)<br>Authors:Hector Garcia Molina, Jeffrey D.Uliman, and Jennifer Widom   |
| Main references (sources)   | Other sources:<br>Systems Analysis and Design" by Alan Dennis, Barbara Haley Wixom, and David Tegarden<br>Database System Concepts" by Abraham Silberschatz, Henry Korth, and S. Sudarshan |
| A- Recommended books and references (magazines).<br>Scientific reports, articles) | Microsoft Access 2016 book by Sherine Al-Masry   |
| B - Electronic references   | <a href="https://books-library.net/free-167753289-download">https://books-library.net/free-167753289-download</a>  |

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|--|
| <p><b>12. Course development plan</b></p> <p>1-Developing the academic vocabulary for the current curriculum by deleting some paragraphs and adding others</p> |
|--|



## Course Description Form

|  |   |
|--|---|
| Course Name  | Numerical Analysis  |
| Course Code  | 220CsMm   |
| Semester / Year                                    | Annual  |
| The history of preparation of this description     | 14-5-2025   |
| Available Attendance Forms                         | Daily class time - (lectures + lab)   |
| Number of Credit Hours (Total)/<br>Number of Units | 90 hours (1 theoretical + 2 practical) per week<br>4 units  |
| Course administrator name                          | Assoc. Prof. Dr. Ala' Najim Abdullah<br>Email: mr.ala_najim@uomisan.edu.iq  |
| Course Objectives                                  | <ul style="list-style-type: none"><li>• Introducing students to the numerical methods of advanced mathematics</li><li>• Enable the student to solve advanced equations as well as work application programs useful in the work of various institutions.</li><li>• Study of inclusion and interpolation, study of numerical calculus, study of numerical solutions of ordinary differential equations.</li></ul> |

|  |
|--|
| Course Outcomes and Methods of Teaching, Learning and Assessment |
|--|

## A- Knowledge Objectives

- 1) The student should remember the information and laws given in the course.
- 2) The student should understand the topics of the course and the mathematical problems related to them.
- 3) The student should be able to apply what he has learned in solving mathematical problems.
- 4) The student should be able to analyze the text of the question and arrange the information to benefit from it in the solution and obtain correct results.
- 5) The student should install problems related to the topics of the course and then reach a correct solution.
- 6) The student should have ideas about the course material and know how to devise the appropriate laws to solve it.

## B - Course skills objectives

- 1) The student must demonstrate the required mathematical laws related to the vocabulary of the course.
- 2) The student should use the appropriate laws to solve each issue.
- 3) The student should be fluent in linking topics that can be linked within the vocabulary of the course.
- 4) The student should distinguish between the uses of theorems and laws during the solution.

## Teaching and learning methods

Video lectures and face-to-face lectures.

Discussion style.

Supporting lectures within the electronic classroom (Google Classroom) as well as from the teacher's YouTube channel.

#### Evaluation methods

1. Daily tests (Quiz) in attendance.
2. Assigning the student to study tasks that are rewarded
3. Assigning the student to make reports within the topics of mathematics.

#### General Objectives

- 1) The student should show interest in the teacher's explanation of the subject.
- 2) The student should have sufficient conviction about the importance of the material he receives.
- 3) The student should be able to organize the data he has to solve mathematical problems.
- 4) The student should be able to discuss and justify solutions to mathematical problems and propose some other possible solutions to the problem

#### Teaching and learning methods

1. Education using electronic programs and the method of discussion between the student and the teacher and support for points of view.
2. Education using scientific competitions, as it works to move the spirit of enthusiasm among students
3. Learning by making the student a teacher to enhance his self-confidence
4. Learning by brainstorming among students

#### Evaluation methods

1. The method of discussion and dialogue between the student and the teacher

2. Observation style

3. Attendance exams (practical and theoretical).

Course skills objectives: 1) Performance skills by involving students in the lesson and discussion and presenting their suggestions and opinions. 2) Cognitive skills through the work of a worksheet related to the requirements of their study based on books in the college library and sober websites. 3) Self-assessment processes for students and determining their levels through discussion and attendance. 4) Practical skills through the practical application of methods and algorithms related to data protection and networks. 5) The student acquires the skill of teaching in the sciences related to information security and network protection

|   |  |
|---|--|
| Teaching and Learning Strategies<br>( <b>Strategy</b> ) | Introduction to Numerical Analysis, Number Modeling, Error Analysis, Calculation Errors, Relative Error, Absolute Error, Percentile Error, Matrices, Matrix Properties, Matrix Inverses, Factor Method<br>Assistant in Inverses and Transformations, Operations on Matrices, Systems of Linear Equations, Numerical Solutions of Systems of Linear Equations, Gaussian Omission, Gaussian Elimination Jordan, Kramer's Rule. Numerical Solutions of Nonlinear Equations, Graphical Method, Half-Termination Method, Breaker Method, Method Newton, Induction and Interpolation, Finite Difference Factors, Forward Differences, Backward Differences, Newton's Formulas for Internal Interpolation, Lagrange's Interpolation Formula<br>Internal, numerical integration, Simpson formula, trapezoidal formula. |
|---|--|

## Course Structure

| The week | Hours                       | Required Learning Outcomes  | Unit or subject name                                 | Learning method  | Evaluation method                     |
|----------|-----------------------------|---|--|--|---------------------------------------|
| 1        | 1Theoretical,<br>2Practical | Introduction to Numerical Analysis  | Preparing the student to write programs              | Presentation + Meet<br>Direct in the hall and use Blackboard + Lab | Monthly exams + reports<br>Laboratory |
| 2        | 1Theoretical,<br>2Practical | Errors and types of errors (error Absolute and relative error)                                    | Preparing the student to write programs              | Presentation + Meet<br>Direct in the hall and use Blackboard + Lab | Monthly exams + reports<br>Laboratory |
| 3        | 1Theoretical,<br>2Practical | Introduction to numerical solutions for a system<br>Linear Equations -<br>Kaos Method<br>To throw | Application of Kaos method to throw program          | Presentation + Meet<br>Direct in the hall and use Blackboard + Lab | Monthly exams + reports<br>Laboratory |
| 4        | 1Theoretical,<br>2Practical | Kaus-Jordan Method  | Kaos Method Application Program-Jordan               | Presentation + Meet<br>Direct in the hall and use Blackboard + Lab | Monthly exams + reports<br>Laboratory |
| 5        | 1Theoretical,<br>2Practical | LUand Golsky analysis + Algorithm   | Application of Gulsky analysis                       | Presentation + Meet<br>Direct in the hall and use Blackboard + Lab | Monthly exams + reports<br>Laboratory |
| 6        | 1Theoretical,<br>2Practical | Orthogonality of matrices and vectors   | Application of Orthogonality of Matrices and vectors | Presentation + Meet<br>Direct in the hall and use Blackboard + Lab | Monthly exams + reports<br>Laboratory |
| 7        | 1Theoretical,<br>2Practical | Solving Equations Using Methods<br>Iterative (Jacobi method + Jacobi method<br>Kaos Seidel )      | Jacobi method application program                    | Presentation + Meet<br>Direct in the hall and use Blackboard + Lab | Monthly exams + reports<br>Laboratory |
| 8        | 1Theoretical,<br>2Practical | Introduction to Numerical Solutions of Equations<br>Non-linear + method of                        | Kaos-Seidel method application program               | Presentation + Meet<br>Direct in the hall and use Blackboard + Lab | Monthly exams + reports<br>Laboratory |

|    |                             |  |   |  |  |
|----|-----------------------------|--|---|--|--|
|    |                             | locating<br>Roots  |   |  |  |
| 9  | 1Theoretical,<br>2Practical | Method of<br>halving periods<br>+ method<br>False position   | Application of<br>the halving<br>method<br>Intervals +<br>Software<br>Application<br>Method<br>False position | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 10 | 1Theoretical,<br>2Practical | Newton's<br>method + point<br>method<br>Steadfast  | Writing<br>Newton's<br>method program<br>+ writing<br>Solid Point<br>Method<br>Program                        | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 11 | 1Theoretical,<br>2Practical | Cutter method  | Writing a cutter<br>method program  | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 12 | 1Theoretical,<br>2Practical | Calculate roots<br>for polyroots,  | Writing a Root<br>Calculator<br>Program<br>For polyroots  | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 13 | 1Theoretical,<br>2Practical | Introduction to<br>Systems Third<br>Party Equations<br>Linear + Point<br>Method<br>Systems<br>Nonlinear<br>Equations | Application of<br>the steadfast<br>point method<br>For the system<br>of nonlinear<br>equations                | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 14 | 1Theoretical,<br>2Practical | Newton's<br>method   | Application of<br>Newton's<br>Method-<br>Newton's<br>Method<br>Developer                                      | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 15 | 1Theoretical,<br>2Practical | Newton's<br>developed<br>method  | Application of<br>Newton's<br>developed<br>method   | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 16 | 1Theoretical,<br>2Practical | Introduction to<br>Numerical<br>Analysis   | Preparing the<br>student to write<br>programs   | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |



|    |                             |  |   |  |  |
|----|-----------------------------|--|---|--|--|
| 17 | 1Theoretical,<br>2Practical | Introduction to<br>inclusion and<br>completion               | Application of<br>insertion and<br>completion                             | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 18 | 1Theoretical,<br>2Practical | Multiple<br>Lakrange Limits<br>+ Differences<br>Expired      | Program for<br>multinomial<br>application<br>Lakrang                      | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 19 | 1Theoretical,<br>2Practical | Progressive<br>Finite Spreads +<br>Drawdown<br>Ended Spreads | Expired Spread<br>Application<br>Program<br>Progressive and<br>regressive | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 20 | 1Theoretical,<br>2Practical | Relativity<br>differences                                    | Relative<br>Differences<br>Application<br>Program                         | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 21 | 1Theoretical,<br>2Practical | Adjustment I<br>aged   | Apply an aging<br>adjustment  | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 22 | 1Theoretical,<br>2Practical | Least Quadratic<br>Theorem                                   | Application of<br>the theory of<br>least squares                          | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 23 | 1Theoretical,<br>2Practical | Numerical<br>differentiation                                 | Application of<br>Numerical<br>Differentiation                            | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 24 | 1Theoretical,<br>2Practical | Numerical<br>integration-<br>semi-method<br>Pervert          | Writing a<br>trapezoidal<br>method program                                | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 25 | 1Theoretical,<br>2Practical | Simpson<br>method  | Writing a<br>Simpson<br>Method<br>Program                                 | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |

|    |                             |   |   |  |  |
|----|-----------------------------|---|---|--|--|
| 26 | 1Theoretical,<br>2Practical | Kaos method   | Application of<br>the Kaos<br>method                                | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 27 | 1Theoretical,<br>2Practical | Rombrk<br>Integration   | Writing a<br>program for an<br>integration<br>application<br>Rombrk | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 28 | 1Theoretical,<br>2Practical | Introduction to<br>Numerical<br>Solutions of<br>Equations<br>Differential | Apply<br>numerical<br>solutions to<br>equations<br>Differential     | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 29 | 1Theoretical,<br>2Practical | Tyler Road  | Tyler Road<br>Application<br>Program                                | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |
| 30 | 1Theoretical,<br>2Practical | Renka Kota<br>method  | Renka Kota<br>method<br>application<br>program                      | Presentation +<br>Meet<br>Direct in the<br>hall and use<br>Blackboard +<br>Lab | Monthly exams<br>+ reports<br>Laboratory |

|                                 |  |
|---------------------------------|--|
| Course Evaluation               | <p>Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily, oral, monthly, written exams, reports .... etc</p> <p>The pursuit (50) degrees consists of (35 theoretical + 15 practical) and (50) degrees of the final exam.</p> |
| Learning and Teaching Resources | <ul style="list-style-type: none"> <li>· Introduction to Numerical Analysis (Dr. Ahmed Saleh Al-Alusi, Dr. Adel Ranil Al-Bayani</li> <li>· Applied engineering and numerical analysis / Dr. Hassan Majeed Hassoun and Mahmoud Atallah Mashkour</li> </ul>                                |
| Main references (sources)       | <p>1-Applied Numerical Analysis, by R. L. Burden, J. D. Faires, Brooks/Cole, Cengage Learning, USA, 2015.</p> <p>2- An Introduction to Programming and Numerical Methods in</p>  |

|                                       |  |
|---------------------------------------|--|
|                                       | MATLAB, by S.R. Otto & J.P. Denier, Springer-Verlag <i>London</i> Limited, 2005.   |
| Electronic<br>References,<br>Websites | www.springer- Numerical partial differential equations<br>4.com/ 978-0-387-23619-3,<br>Websites that deal with mathematics . |

## Course Description Form

|  |                 |  |                                    |         |      |                  |    |
|--|-----------------|--|------------------------------------|---------|------|------------------|----|
| Computational theory   |                 | Course name  | 1                                  |         |      |                  |    |
|  |                 | Course code  | 2                                  |         |      |                  |    |
| 2024-2025  |                 | academic year  | 3                                  |         |      |                  |    |
| 2025   |                 | Description preparation date                           | 4                                  |         |      |                  |    |
| Saffy  |                 | Available attendance forms                             | 5                                  |         |      |                  |    |
| 2 hours per week/ 2 units  |                 | Number of study hours/ Number of units                 | 6                                  |         |      |                  |    |
| Asst.Lect. Mustafa Saleh Mohsen<br><a href="mailto:mustafa@uomisan.edu.iq">mustafa@uomisan.edu.iq</a>  |                 | Course Instructor Name                                 | 7                                  |         |      |                  |    |
| <p>Affective objectives: To enable the student to:that:</p> <p>He appreciates the role of computational theory in dealing with .1<br/>languages.</p> <p>Appreciates the role of scientists in developing computational theory. .2</p> <p>He shows interest in studying Klein's theory. .3</p> <p>Skill objectives: To enable the student to:that:</p> <p>Draws theDFA .1</p> <p>Draws theNFA .2</p> <p>Draws theTG .3</p> <p>Value objectives: Making the student able tothat:</p> <p>Knows Klein's theory. .1</p> <p>Knows Chomsky's theory. .2</p> <p>Knows theDFA</p> |                 | Course objectives                                      | 8                                  |         |      |                  |    |
| <p>Classroom lectures. •</p> <p>Electronic class. •</p> <p>Extracurricular duties. •</p> <p>Daily and monthly exams. •</p>   |                 | Teaching and learning strategies                       | 9                                  |         |      |                  |    |
| Evaluation method  | Learning method | Name of unit or topic                                  | Required learning outcomes         | watches | week | Course structure | 10 |
| Homework   | a lecture       | Introduction to computer theory<br>Regular Expressions | Enabling the student to understand | 2       | 1    |                  |    |
| Homework   |                 |  |                                    | 2       | 2    |                  |    |
| Homework   |                 |  |                                    | 2       | 3    |                  |    |
| Homework   |                 |  |                                    | 2       | 4    |                  |    |
| Homework   |                 |  |                                    | 2       | 5    |                  |    |

|            |  |                               |                                  |   |    |  |  |
|------------|--|-------------------------------|----------------------------------|---|----|--|--|
| Daily exam |  | Solving problems and examples | the material                     | 2 | 6  |  |  |
| homework   |  | Finite Automata               | And solve the required questions | 2 | 7  |  |  |
| Daily exam |  | DFA & NFA                     |                                  | 2 | 8  |  |  |
| homework   |  | 1st monthly exam              |                                  | 2 | 9  |  |  |
| Homework   |  | Converting NFA to DFA         |                                  | 2 | 10 |  |  |
| Daily exam |  | Transition Graphs             |                                  | 2 | 11 |  |  |
| homework   |  | Solving problems and examples |                                  | 2 | 12 |  |  |
| Homework   |  | Kleene's Theorem part 1       |                                  | 2 | 13 |  |  |
| Daily exam |  | Kleene's Theorem prt2         |                                  | 2 | 14 |  |  |
| homework   |  | Kleene's Theorem part 3       |                                  | 2 | 15 |  |  |
| Homework   |  | Solving problems and examples |                                  | 2 | 16 |  |  |
| Daily exam |  | (2nd) monthly exam            |                                  | 2 | 17 |  |  |
| homework   |  | Context-Free Grammars         |                                  | 2 | 18 |  |  |
| Homework   |  | Trees                         |                                  | 2 | 19 |  |  |
| Daily exam |  | Regular Grammars              |                                  | 2 | 20 |  |  |
| homework   |  | Chomsky Normal Form           |                                  | 2 | 21 |  |  |
| Homework   |  | CFG to CNF                    |                                  | 2 | 22 |  |  |
|            |  | Solving problems and examples |                                  | 2 | 23 |  |  |
|            |  | (3rd) monthly exam            |                                  | 2 | 24 |  |  |
|            |  | Pushdown Automata             |                                  | 2 | 25 |  |  |
|            |  | CFG = PDA                     |                                  | 2 | 26 |  |  |
|            |  | Context-Free Languages        |                                  | 2 | 27 |  |  |
|            |  | Non-Context-Free Languages    |                                  | 2 | 28 |  |  |
|            |  | Solving problems and examples |                                  | 2 | 29 |  |  |
|            |  | Parsing                       |                                  | 2 | 30 |  |  |

|   |  |   |  |  |  |                                       |    |
|---|--|---|--|--|--|---------------------------------------|----|
|   |  | Turing Machines<br>Solving problems<br>and<br>examples<br>monthly exam (4th)        |  |  |  |                                       |    |
| Grade distribution out of 100<br>60% monthly exams-10% daily exams<br>10% daily preparation and participation in activities<br>10% duties-10% reports |  |   |  |  |  | Course<br>Evaluation                  | 11 |
|   |  | Required textbooks (methodology if available)                                       |  |  |  | Learning and<br>teaching<br>resources | 12 |
| INTRODUCTION TO COMPUTER<br>THEORY, Daniel<br>IA Cohen, 2nd edition   |  | Main references (sources)   |  |  |  |                                       |    |
| INTRODUCTION TO THE<br>THEORY COMPUTATION, Michael<br>Sipser  |  | Recommended supporting books and references<br>(scientific journals, reports, etc.) |  |  |  |                                       |    |
|   |  | Electronic references, websites   |  |  |  |                                       |    |

## Course description form

|  |                    |
|--|--------------------|
| 1. Course Name: Secondary Education and Educational Administration   |                    |
| 2. Course Code: Second stage -computers  |                    |
| 2. Season/Year : annual  |                    |
| 3. Date of preparation of this description 2024-2025   |                    |
| 4. Forms of attendance available on a daily basis: daily   |                    |
| 5. of study hours (total) / Number of units (total) 60 Theoretical 60 Practical: 2 hours   |                    |
| 6. The name of the course leader (if more than one name is mentioned): nothing   |                    |
| Name: Azhar Abd ALwahab<br>Email : azhar.abdulwahab@uomisan  |                    |
| 8. Course objectives   |                    |
| <p>Introducing students to the importance of education and secondary education, types of secondary -<br/>schools, and experiences of some countries in the world in secondary education</p> <p>Introducing students to the objectives, elements, characteristics, and fields of administrations -<br/>((educational-educational-school</p> <p>.Introducing students to administrative leadership -<br/>.Introducing students to educational supervision -</p> <p>Introducing students to the overall quality of education, and the role of supervision in achieving -<br/>.quality education</p> <p>.Introducing students to the relationship between school and society -</p> <p>Enabling students to secondary education, administration, educational administration, educational -<br/>administration, school administration, classroom management, educational supervision, quality of<br/>.education, and school relationship</p> <p>- Identifying modern trends in educational administration.</p> |                    |
| 9. Teaching and learning strategies  |                    |
| <p>- What is the definition of each of education, secondary education, educational administration, educational management, school administration, administrative leadership, educational supervision, and quality of education</p> <p>A2- What is educational administration (centralization and decentralization)</p> <p>A3- What are the principles of educational administration and the factors affecting it</p> <p>A4- What is educational administration and its fields</p>  | Subject objectives |

|  |  |
|--|--|
| - What is school management (its goals - components - elements -<br>?patterns - characteristics<br>A6- What is educational supervision (its importance - goals -<br>?(methods - types - advantages - functions<br>7- What is comprehensive quality in education (goals - elements -<br>?(standards - benefits - obstacles to its application<br>.Skill objectives for the course -2<br>Assigning students to conduct research reports related to the -<br>.subject's vocabulary<br>Directing questions to students related to the subject of the study -<br>-:Emotional and value objectives -3<br>- Assigning students to write reports according to the curriculum's<br>.vocabulary<br>A2- Assigning students to obtain data and information related to<br>.some curriculum's vocabulary<br>A3- Giving them some external questions related to the curriculum<br>vocabulary. |  |
|--|--|

#### 10. Course structure

| week | Learning method                                  | Name of the unit or topic  | Required learning outcomes   | hours | Evaluation method     |
|------|--|--|--|-------|-----------------------|
| 1.   | Lecture, Questions and Discussion                | Education and secondary education and its objective                              | The student learns about education, secondary education and their importance | 2     | Oral exams Oral exams |
| 2.   | Lecture, Questions and Discussion                | Experiences of some countries in the world in secondary education, part one      | The student learns about successful secondary education experiences.         | 2     | Oral exams            |
| 3.   | Lecture, Questions and Discussion                | Completing the experiences of some countries in the world in secondary education | The student learns about successful secondary education experiences.         | 2     | Oral exams            |
| 4.   | Lecture, Questions and Discussion                | The concept of management, management and types                                  | The student learns about management  | 2     | Oral exams            |
| 5.   | Lecture, Questions and Discussion                | Educational administration (central and decentralized)                           | Learn about educational administration and its Types                         | 2     | Oral exams            |
| 6.   |  | First month exam first semester  |  | 2     |                       |
| 7.   | Lecture, ask questions, discuss and participate. | Educational administration and its fields.                                       | The student learns about educational administration.                         | 2     | Oral exams            |



|     |   |   |   |   |  |
|-----|---|---|---|---|--|
| 8.  | Lecture, ask questions, discuss them and participate in preparing reports on the subject. | School administration (objectives and components).      | The student learns about school administration.                                 | 2 | Oral exams and writing a report on the subject |
| 9.  | Lecture, ask questions, discuss them and participate in preparing reports on the subject. | School administration (elements and patterns)           | Forming a comprehensive picture of school management                            | 2 | Oral exams                                     |
| 10. | Lecture, Questions and Discussion   | Characteristics of school management                    |   | 2 | Oral exams                                     |
| 11. |   | Second month exam first semester                        |   | 2 |  |
| 12. | Lecture, Questions and Discussion   | Duties of the school principal                          | The student learns the tasks (duties) of the school principal.                  | 2 | Oral exams                                     |
| 13. | Lecture, ask questions, discuss them and participate in preparing reports on the subject. | School Principal Specifications and Skills              | The student learns about the specifications and skills of the school principal. | 2 | Oral exams                                     |
| 14. | Lecture, Questions and Discussion   | Educational leadership.                                 | The student learns the meaning of leadership in its various forms.              | 2 | Oral exams                                     |
| 15. | Lecture, Questions and Discussion   | Educational supervision.                                | The student learns about supervision as relates to his field as educator.       | 2 | Oral exams                                     |
| 16. |   | First exam, second semester                             |   | 2 |  |
| 17. | Lecture, Questions and Discussion   | The importance of objectives of educational supervision | The student learns the importance of supervision.                               | 2 | Oral exams and writing a report on the subject |
| 18. | Lecture, Questions and Discussion   | Educational supervision methods                         | The student learns about the different types of methods.                        | 2 | Oral exams                                     |
| 19. | Lecture, Questions and Discussion   | Types of educational supervision                        | The student will have an idea about its different types.                        | 2 | Oral exams                                     |

|     |   |   |   |   |  |
|-----|---|---|---|---|--|
| 20. | Lecture, Questions and Discussion   | Advantages of educational supervision   | The student learns about its features.  | 2 | Oral exams                                     |
| 21. | Lecture, Questions and Discussion   | Educational supervision jobs  | The student learns about the most important functions.  | 2 | Oral exams                                     |
| 22. |   | Second semester second exam   |   | 2 |  |
| 23. | Lecture, ask questions, discuss them and participate in preparing reports on the subject. | Total Quality in Education  | Recognizes the need quality in education  | 2 | Oral exams and writing a report on the subject |
| 24. | Lecture, Questions and Discussion   | Total Quality Objectives in School  | recognizes the goals  | 2 | Oral exams                                     |
| 25. | Lecture, Questions and Discussion   | Total Quality Leadership in School and its Elements   | He recognizes the ne for quality leadership   | 2 | Oral exams                                     |
| 26. | Lecture, Questions and Discussion   | Total Quality Standards   | The student learns th there are standards fo educational quality th must be adhered to.   | 2 | Oral exams                                     |
| 27. | Lecture, Questions and Discussion   | The relationship between supervision and quality of education, and th obstacles to its implementation | The student recognizes the relationship between supervision and the quality of education.   | 2 | Oral exams                                     |
| 28. | Lecture, Questions and Discussion   | The role of educational supervision in achieving comprehensive quality.                               | The student learns about the role of supervision in achieving quality.  | 2 | Oral exams                                     |
| 29. | Lecture, Questions and Discussion   | Benefits of applying quality concepts   | Know if quality has benefits that are necessary to implement.   | 2 | Oral exams                                     |
| 30. | Lecture, Questions and Discussion   | School and Society  | The student learns about the importance the relationship between them and th reasons for the weakness of the relationship between them. | 2 | Oral exams                                     |

|  |   |
|--|---|
| 11. Course evaluation  |   |
| The grade is distributed out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc. Each (monthly exam of 20 + 5 activities (participation + preparing reports + educational assignments) |   |
| 12.Learning and teaching resources   |   |
| Required textbooks (methodology if any)  | Management curricula, educational administration, leadership, supervision and quality of education.   |
| Main References (Sources)  | <p>Secondary Education -1<br/>Administration and Supervision, Dr. Ali Hattab - Dr. Youssef Yaqoub. 2015</p> <p>Principles of Educational -2<br/>Administration and Supervision, .Abdullah Al-Saad, 2018</p> <p>3-Educational Leadership, Dr. Sami Abdel Fattah Raouf 2018</p> |
| Recommended supporting books and references (scientific journals, reports, etc.)   | <p>Academic Journal of Research and Studies<a href="https://www.acjrs.com">https://www.acjrs.com</a></p> <p>Scientific Gateway for Research and Studies<a href="https://www.sciegate.com">https://www.sciegate.com</a>.</p>   |
| Electronic references, websites  | <a href="https://www.noor-book.com">https://www.noor-book.com</a>   |

# English Language Course Syllabus – 2nd Year – Computer Education Department

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## General Information:

College: College of Education

Department: Computer Education

Stage: Second Year

Course Title: English Language

Academic Year: 2024–2025

Course Duration: Two Semesters

Weekly Hours: hours

Instructor: **[Fatima Rahim Jabbar]**

## General Aims of the Course:

1. Build students' foundational English language skills to support academic study and future professional needs.
2. Equip students with basic grammar and vocabulary essential for understanding and producing technical texts.
3. Enhance students' confidence and competence in reading and writing English in computing-related contexts.
4. Encourage effective communication in both written and spoken English within academic and technical environments.

## Course Learning Outcomes (CLOs):

By the end of this course, students will be able to:

1. Understand and apply fundamental English grammar and sentence structures.
2. Read and comprehend general and technical texts related to computing.
3. Use relevant vocabulary in IT and academic contexts.
4. Communicate effectively in written formats such as emails, reports, and summaries.
5. Deliver short technical presentations in English with clarity.

## Skill-Based Objectives (Psychomotor Skills):

By the end of the course, students will be able to:

1. Apply correct English grammar in writing clear and accurate technical sentences.
2. Practice reading and analyzing short technical texts related to computer science.
3. Compose professional emails, reports, and short summaries in English.
4. Use appropriate technical vocabulary in spoken and written communication.

5. Deliver structured oral presentations using clear pronunciation and intonation.
6. Participate in pair or group tasks using English for academic discussion.

### Teaching and Learning Strategies:

To achieve the intended learning outcomes, the following strategies will be used:

1. Interactive Lectures – to explain grammatical rules and vocabulary in context.
2. Task-Based Learning – through activities like writing reports or emails.
3. Collaborative Learning – pair and group work to enhance communication.
4. Problem-Solving Tasks – using English to discuss and resolve academic problems.
5. Role-Play and Simulations – for practicing real-life communication situations.
6. Multimedia and Technology Integration – using videos, software, and presentations.
7. Peer Review and Feedback – to develop critical thinking and self-correction.

### Assessment Methods:

- Class participation and attendance: 10%
- Homework and assignments: 20%
- Quizzes and tests: 30%
- Final written and oral exams: 40%

### Course Structure:

| Week | Topic                             | Hours | Notes                     |
|------|-----------------------------------|-------|---------------------------|
| 1    | Introduction to Technical English | 2     | –                         |
| 2    | Parts of Speech                   | 2     | Grammar focus             |
| 3    | Verb Tenses                       | 2     | Past, Present, Future     |
| 4    | Sentence Structure                | 2     | Simple, compound, complex |
| 5    | Vocabulary in IT                  | 2     | Basic technical terms     |
| 6    | Reading Comprehension I           | 2     | Short IT texts            |
| 7    | Writing Emails                    | 2     | Formal/informal           |

|    |                                   |   |                           |
|----|-----------------------------------|---|---------------------------|
| 8  | Midterm Revision & Practice       | 2 | –                         |
| 9  | Midterm Exam                      | 2 | –                         |
| 10 | Passive and Active Voice          | 2 | Grammar application       |
| 11 | Conditional Sentences             | 2 | Real/unreal conditions    |
| 12 | Reading Comprehension II          | 2 | Longer texts              |
| 13 | Writing Reports and Summaries     | 2 | Academic focus            |
| 14 | Presentation Skills               | 2 | Using slides              |
| 15 | Final Exam                        | 2 | Written + Oral            |
| 16 | Introduction to Technical English | 2 | –                         |
| 17 | Parts of Speech                   | 2 | Grammar focus             |
| 18 | Verb Tenses                       | 2 | Past, Present, Future     |
| 19 | Sentence Structure                | 2 | Simple, compound, complex |
| 20 | Vocabulary in IT                  | 2 | Basic technical terms     |
| 21 | Reading Comprehension I           | 2 | Short IT texts            |
| 22 | Writing Emails                    | 2 | Formal/informal           |
| 23 | Midterm Revision & Practice       | 2 | –                         |
| 24 | Midterm Exam                      | 2 | –                         |
| 25 | Passive and Active Voice          | 2 | Grammar application       |

|    |                               |   |                        |
|----|-------------------------------|---|------------------------|
| 26 | Conditional Sentences         | 2 | Real/unreal conditions |
| 27 | Reading Comprehension II      | 2 | Longer texts           |
| 28 | Writing Reports and Summaries | 2 | Academic focus         |
| 29 | Presentation Skills           | 2 | Using slides           |
| 30 | Final Exam                    | 2 | Written + Oral         |

## Course Description

| 1. Course name : Baath Party crimes in Iraq   |                 |  |                                      |                          |      |
|---|-----------------|--|--------------------------------------|--------------------------|------|
| 2. Course code:   |                 |  |                                      |                          |      |
| 3. semester/year : 2023 - 2024  |                 |  |                                      |                          |      |
| 4. Date this description was prepared:3/24/2024   |                 |  |                                      |                          |      |
| 5. Available attendance forms:  |                 |  |                                      |                          |      |
| 6. Number of study hours (total) / Number of units (total)  |                 |  |                                      |                          |      |
| 7. Name of the course administrator (if more than one name is mentioned)  |                 |  |                                      |                          |      |
| the name: Mohammed Fadel Mohammed   |                 |  | Email:mohammed fadhel@uomisan.edu.iq |                          |      |
| 8. Course objectives  |                 |  |                                      |                          |      |
| <ul style="list-style-type: none"> <li>- Identifying crimes committed by the Baath Party regime</li> <li>- Creating greater awareness among students to reject all forms of injustice</li> <li>- Defining the civil rights enjoyed by Iraqi citizens</li> </ul> |                 |  |                                      | <b>Course objectives</b> |      |
| 9. Teaching and learning strategies   |                 |  |                                      |                          |      |
| <ul style="list-style-type: none"> <li>- Training the student on the skill of discussion and speaking by following the student-teacher dialogue method</li> <li>Or use study circles.</li> </ul>  |                 |  |                                      | Strategy                 |      |
| 10. Course structure  |                 |  |                                      |                          |      |
| Evaluation method   | Learning method | Name of unit or topic  | Required learning outcomes           | watches                  | week |
| Assignments and tests   | a lecture       | Introducing students to the most important ideas related to each word mentioned. | theoretical                          | 1                        | 1    |
| Assignments and tests   | a lecture       | The student learns:Crime sections  | theoretical                          | 1                        | 2    |
| Assignments and tests   | a lecture       | The student learns about: types of crimes  | theoretical                          | 1                        | 3    |
| Assignments and tests   | a lecture       | The student learns about: the decisions of the Supreme Criminal Court.           | theoretical                          | 1                        | 4    |
| Assignments and tests   | a lecture       | The student learns about: psychological crimes and their effects.                | theoretical                          | 1                        | 5    |
| Assignments and tests   | a lecture       | The student learns:Mechanisms of psychological crimes                            | theoretical                          | 1                        | 6    |



|                       |           |   |             |   |    |
|-----------------------|-----------|---|-------------|---|----|
| Assignments and tests | a lecture | The student learns about: social crimes   | theoretical | 1 | 7  |
| Assignments and tests | a lecture | The student learns about: the Baath regime position on religion.  | theoretical | 1 | 8  |
| Assignments and tests | a lecture | The student learns about: the militarization of society.  | theoretical | 1 | 9  |
| Assignments and tests | a lecture | exam  | theoretical | 1 | 10 |
| Assignments and tests | a lecture | The student learns about: the end of Iraqi law<br>The student learns about: pictures of human rights violations in Iraq | theoretical | 1 | 11 |
| Assignments and tests | a lecture | The student learns about: the prisons and detention centers of the Baath regime.  | theoretical | 1 | 12 |
| Assignments and tests | a lecture | The student learns about: the environmental crimes of the Baath regime in Iraq.   | theoretical | 1 | 13 |
| Assignments and tests | a lecture | The student learns about: radioactive war pollution   | theoretical | 1 | 14 |
| Assignments and tests | a lecture | The student learns about: the destruction of cities and villages.   | theoretical | 1 | 15 |
| Assignments and tests | a lecture | The student learns about: draining marshes  | theoretical | 1 | 16 |
| Assignments and tests | a lecture | The student learns about: orchard clearing  | theoretical | 1 | 17 |
| Assignments and tests | a lecture | The student learns about: crimes of mass graves   | theoretical | 1 | 18 |
| Assignments and tests | a lecture | The student learns about: the events of the genocide cemeteries.  | theoretical | 1 | 19 |
| Assignments and tests | a lecture | The student learns about: the chronological classification of university cemeteries                                     | theoretical | 1 | 20 |
| Assignments and tests | a lecture | The student learns about: the events of 1966  | theoretical | 1 | 21 |
| Assignments and tests | a lecture | The student learns about: The Abad Cemetery from 1963 to 1979   | theoretical | 1 | 22 |
| Assignments and tests | a lecture | The student learns about: the events of the year 1980 to 1988   | theoretical | 1 | 23 |
| Assignments and tests | a lecture | The student learns about: the events of 1991  | theoretical | 1 | 24 |
| Assignments and tests | a lecture | The student learns about: the locations of mass graves  | theoretical | 1 | 25 |
| Assignments and tests | a lecture | The student learns about: The crime of the Barzani Kurds  | theoretical | 1 | 26 |
| Assignments and tests | a lecture | The student learns about: the Halabja crime<br>The student learns about: the crime of the Shaaban uprising.             | theoretical | 1 | 27 |
| Assignments and tests | a lecture | The student learns about: mass grave sites  | theoretical | 1 | 28 |

#### 11. Course Evaluation

The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

#### 12 Learning and Teaching Resources

|                                    |   |
|------------------------------------|---|
| Baath regime crimes in Iraq        | Required textbooks (methodology if any) |
| The Iraqi Constitution of 2005 AD. | Main references (sources)               |

|  |   |
|--|---|
|  | Recommended supporting books and references (scientific journals, reports...) |
|  | Electronic references, websites   |

**Course Description Form**University of Maysan/Faculty of Education / Computer Science Department

**Second Stage**

|  |   |
|--|---|
| Arabic   | 1. Course name  |
|  | 2. codeThe decision:  |
| annual   | 3. the chapter /Year:   |
| 2024/2025  | 4. Date preparedDescription:                                  |
| Lectures are delivered in person to students according to the schedule announced by the college.   | 5. AAavailable attendance forms:                              |
| 30 hours (1 hour per week * 30 weeks)  | 6. Number of study hours (total) / Number of units (total)    |
| Name: Asst.Lect. Ali Ghazi Mohammed<br><br>Ali.ghazi@uomisan.edu.iq  | 7. Course Instructor Name(If more than one name is mentioned) |
| 8. Course objectives   |   |
| Correcting the tongue and hand from falling into linguistic errors,<br><br><div> Preparing qualified linguistic, literary and educational staff for research and teaching in various educational institutions, especially at the primary level. </div> | Course objectives   |

|   |   |                       |   |          |           |
|---|---|-----------------------|---|----------|-----------|
|   | Raising a generation that cares about its nation's intellectual and literary heritage   |                       |   |          |           |
|   | Working to preserve the eloquence of the Arabic language  |                       |   |          |           |
|   | Enriching libraries with research and studies by providing serious university theses.   |                       |   |          |           |
|   | Meeting the needs of universities, research centers, and the Ministry of Education for linguistic, literary, and educational specializations. |                       |   |          |           |
|   | Introducing students to the Arabic heritage of language and literature, as well as proper educational curricula.                              |                       |   |          |           |
| 1. Teaching and learning strategies   |   |                       |   |          |           |
| 1. In-person lectures in classrooms.<br>2. Discussion style, surprise exams and skill development methods.<br>3. Asking intellectual questions or holding a competition between students, stimulating creative thinking and providing clear and quick answers to the problems raised. |   |                       |   | Strategy |           |
| 4. Course structure   |   |                       |   |          |           |
| Evaluation method   | Learning method   | Name of unit or topic | Required learning outcomes                            | watches  | week      |
| In-person semester and daily exams  | In-person lectures  | nominal sentence      | The student is able to understand the given material. | 1        | the first |

|   |                           |                              |  |          |                   |
|---|---------------------------|------------------------------|--|----------|-------------------|
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>Kan and its sisters</b>   | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>the second</b> |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>In and its sisters</b>    | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>the third</b>  |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>La negating the genus</b> | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>Fourth</b>     |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>Verb signs</b>            | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>Fifth</b>      |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | <b>past tense</b>            | <b>The student is able to understand the given material.</b> | <b>1</b> | <b>Sixth</b>      |

|   |                           |                                    |  |   |            |
|---|---------------------------|------------------------------------|--|---|------------|
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | present tense verb                 | <b>The student is able to understand the given material.</b> | 1 | Seventh    |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | The nasb of the present tense verb | <b>The student is able to understand the given material.</b> | 1 | The eighth |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Building the present tense verb    | <b>The student is able to understand the given material.</b> | 1 | Ninth      |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | imperative verb                    | <b>The student is able to understand the given material.</b> | 1 | tenth      |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | actor                              | <b>The student is able to understand the given material.</b> | 1 | eleventh   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | The object                         | <b>The student is</b>  | 1 | twelfth    |

|   |                           |  |  |   |             |
|---|---------------------------|--|--|---|-------------|
|   |                           |  | able to understand the given material.                       |   |             |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Selections from poetic texts           | <b>The student is able to understand the given material.</b> | 1 | thirteenth  |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Al-Mutanabbi's Nuniyah                 | <b>The student is able to understand the given material.</b> | 1 | fourteenth  |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Al-Qushayri's eye                      | <b>The student is able to understand the given material.</b> | 1 | fifteenth   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Village Market / Abdul Wahab Al-Bayati | <b>The student is able to understand the given material.</b> | 1 | sixteenth   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Selections from Arabic Prose           | <b>The student is able to understand</b>                     | 1 | seventeenth |

|                                    |                    |  |   |   |               |
|------------------------------------|--------------------|--|---|---|---------------|
|                                    |                    |  | the given material.                                   |   |               |
| In-person semester and daily exams | In-person lectures | The wet nurses (Taha Hussein)            | The student is able to understand the given material. | 1 | eighteenth    |
| In-person semester and daily exams | In-person lectures | punctuation marks                        | The student is able to understand the given material. | 1 | nineteenth    |
| In-person semester and daily exams | In-person lectures | Original and secondary diacritical marks | The student is able to understand the given material. | 1 | Twenty        |
| In-person semester and daily exams | In-person lectures | In linguistic correction                 | The student is able to understand the given material. | 1 | twenty-first  |
| In-person semester and daily exams | In-person lectures | Introduction to Dictation                | The student is able to understand the given material. | 1 | twenty-second |



|   |                           |                            |   |   |                       |
|---|---------------------------|----------------------------|---|---|-----------------------|
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Hamzat al-Qat` and al-Wasl | The student is able to understand the given material. | 1 | <b>twenty-third</b>   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | The letters Dad and Tha    | The student is able to understand the given material. | 1 | <b>twenty-fourth</b>  |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Drawing the hamza          | The student is able to understand the given material. | 1 | <b>twenty-fifth</b>   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | drawing of the letter alif | The student is able to understand the given material. | 1 | <b>twenty-sixth</b>   |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Quranic stories            | The student is able to understand the given material. | 1 | <b>twenty-seventh</b> |

|   |                           |  |  |   |                      |
|---|---------------------------|--|--|---|----------------------|
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | The story of the Prophet Joseph, peace be upon him | <b>The student is able to understand the given material.</b> | 1 | <b>twenty-eighth</b> |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | The story of the People of the Cave                | <b>The student is able to understand the given material.</b> | 1 | <b>twenty-ninth</b>  |
| <b>In-person semester and daily exams</b> | <b>In-person lectures</b> | Surah Ad-Duha                                      | <b>The student is able to understand the given material.</b> | 1 | <b>thirty</b>        |

## 5. Course Evaluation

\* **Semi-daily and monthly tests**  
**And surprise exams.**  
Daily classroom participation

## 6. Learning and teaching resources

Arabic Language Education and Skills, Dr. Ahmed Ayoub Gerges  
Arabic Grammar and its Application - Dr. Ahmed Shalaby

Required textbooks (methodology if any)

|   |  |
|---|--|
| Arabic Grammar by Abdul Latif Al-Saidi  |  |
| Study of linguistic sound, Dr. Ahmed Mukhtar Omar   |  |
| The Complete Poetic Works of Ibrahim Touqan<br>Arabic calligraphy: its origins and development, Dr. Adel Al-Alusi | Main references (sources)  |
|   | Recommended supporting books and references (scientific journals, reports, etc.) |
|   | Electronic references, websites  |

## Course Description

|  |              |                                   |   |                        |                          |
|--|--------------|-----------------------------------|---|------------------------|--------------------------|
| 1. Course Title : Developmental Psychology   |              |                                   |   |                        |                          |
| 2. Course Code:  |              |                                   |   |                        |                          |
| 3. Semester / Year :2024/2025  |              |                                   |   |                        |                          |
| 4. Date of preparation of this description :12/2/2025  |              |                                   |   |                        |                          |
| 5. Available forms of attendance: Lectures are delivered in person to students according to the schedule announced in the department |              |                                   |   |                        |                          |
| 6. Number of study hours (total) / number of units (total) * 60 hours (2 hours per week * 30 weeks)                                  |              |                                   |   |                        |                          |
| 7. <u>Course administrator's name (if more than one name)</u>  |              |                                   |   |                        |                          |
| Name: Eng. Hawra Hashem Naima ALAEmile:  |              |                                   |   |                        |                          |
| 8. Course Objectives   |              |                                   |   |                        |                          |
| <b>Course Objectives</b>   |              |                                   | 1_ Definition of Developmental Psychology<br>2_ Statement of the stages of linguistic development<br>3_ Definition of the stages of cognitive development of humans<br>4_ Know the stages of human development<br>5_ Distinguish between branches of developmental psychology |                        |                          |
| 9. Teaching and Learning Strategies  |              |                                   |   |                        |                          |
| Strategy   |              |                                   | 1_ Face-to-face lectures in the classrooms<br>2_ The method of discussion and exchange of views to break psychological barriers and reach the right opinion<br>3_ Asking intellectual questions or brainstorming to develop their abilities and ability to discuss            |                        |                          |
| 10. Course Structure   |              |                                   |   |                        |                          |
| <b>The week</b>  | <b>Hours</b> | <b>Required Learning Outcomes</b> | <b>Unit or subject name</b>   | <b>Learning method</b> | <b>Evaluation method</b> |
| 1  | Two hours    | The student can understand        | Developmental psychology - definition -   | Face-to-face lectures  | Quarterly, daily and     |

|   |           |   |   |                       |                                       |
|---|-----------|---|---|-----------------------|---------------------------------------|
|   |           | the material given                            | importance - the meaning of growth                                      |                       | attendance exams                      |
| 2 | Two hours | The student can understand the material given | General principles of growth, stages of growth                          | Face-to-face lectures | Quarterly, daily and attendance exams |
| 3 | Two hours | The student can understand the material given | Factors affecting growth<br>Genetic factors                             | Face-to-face lectures | Quarterly, daily and attendance exams |
| 4 | Two hours | The student can understand the material given | Environmental factors   | Face-to-face lectures | Quarterly, daily and attendance exams |
| 5 | Two hours | The student can understand the material given | Research Methods in Developmental Psychology<br>Transverse Longitudinal | Face-to-face lectures | Quarterly, daily and attendance exams |
| 6 | Two hours | The student can understand the material given | Experimental correlation  | Face-to-face lectures | Quarterly, daily and attendance exams |
| 7 | Two hours | The student can understand the material given | Childhood stages - definition and importance                            | Face-to-face lectures | Quarterly, daily and attendance exams |
| 8 | Two hours | The student can understand the material given | Childhood   | Face-to-face lectures | Quarterly, daily and attendance exams |

|    |           |   |  |                       |                                       |
|----|-----------|---|--|-----------------------|---------------------------------------|
| 9  | Two hours | The student can understand the material given | Physical growth and mental development                                 | Face-to-face lectures | Quarterly, daily and attendance exams |
| 10 | Two hours | The student can understand the material given | Linguistic and social development                                      | Face-to-face lectures | Quarterly, daily and attendance exams |
| 11 | Two hours | The student can understand the material given | Congenital and emotional development                                   | Face-to-face lectures | Quarterly, daily and attendance exams |
| 12 | Two hours | The student can understand the material given | The role of social upbringing institutions for children and the family | Face-to-face lectures | Quarterly, daily and attendance exams |
| 13 | Two hours | The student can understand the material given | The role of child and school socialization institutions                | Face-to-face lectures | Quarterly, daily and attendance exams |
| 14 | Two hours | The student can understand the material given | Peers and media  | Face-to-face lectures | Quarterly, daily and attendance exams |
| 15 | Two hours | The student can understand the material given | Adolescence - its definition - its importance - its stages             | Face-to-face lectures | Quarterly, daily and attendance exams |
| 16 | Two hours | The student can understand the material given | Physical development, mental and cognitive development                 | Face-to-face lectures | Quarterly, daily and attendance exams |
| 17 | Two hours | The student can understand                    | Social, emotional and moral development                                | Face-to-face lectures | Quarterly, daily and                  |

|    |           |   |  |                       |                                       |
|----|-----------|---|--|-----------------------|---------------------------------------|
|    |           | the material given                            |  |                       | attendance exams                      |
| 18 | Two hours | The student can understand the material given | The adolescent and society   | Face-to-face lectures | Quarterly, daily and attendance exams |
| 19 | Two hours | The student can understand the material given | Teenagers, peers and media   | Face-to-face lectures | Quarterly, daily and attendance exams |
| 20 | Two hours | The student can understand the material given | The adolescent and the profession The importance of work in the life of a teenager                 | Face-to-face lectures | Quarterly, daily and attendance exams |
| 21 | Two hours | The student can understand the material given | Its importance is choosing a profession and the factors affecting it and its compatibility with it | Face-to-face lectures | Quarterly, daily and attendance exams |
| 22 | Two hours | The student can understand the material given | Teenage trends and tendencies  | Face-to-face lectures | Quarterly, daily and attendance exams |
| 23 | Two hours | The student can understand the material given | The importance of tendencies and trends  | Face-to-face lectures | Quarterly, daily and attendance exams |
| 24 | Two hours | The student can understand the material given | Factors affecting their attitudes and tendencies   | Face-to-face lectures | Quarterly, daily and attendance exams |
| 25 | Two hours | The student can understand the                | Some teenage problems  | Face-to-face lectures | Quarterly, daily and attendance exams |

|   |           |   |   |                       |                                       |
|---|-----------|---|---|-----------------------|---------------------------------------|
|   |           | material given                                |   |                       |                                       |
| 26  | Two hours | The student can understand the material given | Academic delay  | Face-to-face lectures | Quarterly, daily and attendance exams |
| 27  | Two hours | The student can understand the material given | Aggressive behavior   | Face-to-face lectures | Quarterly, daily and attendance exams |
| 28  | Two hours | The student can understand the material given | Adolescent delinquency  | Face-to-face lectures | Quarterly, daily and attendance exams |
| 11.Course Evaluation  |           |   |   |                       |                                       |
| Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily, oral, monthly, written exams, reports .... etc |           |   |   |                       |                                       |
| 12Learning and Teaching Resources   |           |   |   |                       |                                       |
| Required textbooks (methodology, if any)  |           |   | Developmental Psychology, Ghorab, Hisham Ahmed (2015)   |                       |                                       |
| Main references (sources)   |           |   | 1_ Psychology of childhood and adolescence, Al-Alusi, Jamal Hussein (1983)<br>2_ Evolutionary Psychology, Arifeg, Sami (1993)<br>3_ Introduction to the science of evolution, Alwan, Fadia (2003)<br>4_ The psychology of growth, Anani, Hanan Abdel Hamid (2003)<br>5_ Developmental psychology _ from childhood to old age, parasite, compliance Zain al-Din (2004) |                       |                                       |
| Recommended books and references (scientific journals, reports...)  |           |   |   |                       |                                       |
| Electronic References, Websites   |           |   |   |                       |                                       |