### ATTACHMENT 5.

**Kingdom of Saudi Arabia**

**The National Commission for Academic Accreditation & Assessment**

**Course Specifications**

**(CS)**

**Graduation Project**

**(COMP 3504)**

**Course Specifications**

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| Institution **King Saud University** Date: **06/06/2017** |
| College/Department : **Community College, Computer Science** |

A. Course Identification and General Information

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| 1. Course title and code: **Graduation Project ( COMP 3504)** |
| 2. Credit hours: **3** |
| 3. Program(s) in which the course is offered.  (If general elective available in many programs indicate this rather than list programs)  **Computer Science Program** |
| 4. Name of faculty member responsible for the course  **Coordinator: Dr Amr Tolba** |
| 5. Level/year at which this course is offered  **Level-5** |
| 6. Pre-requisites for this course (if any)  **COMP 2403** |
| 7. Co-requisites for this course (if any)  **None** |
| 8. Location if not on main campus  **Community College** |
| 9. Mode of Instruction (mark all that apply)  50%  √  a. traditional classroom What percentage?  30%  √  b. blended (traditional and online) What percentage?  10%  √  c. e-learning What percentage?  d. correspondence What percentage?  10%  √  f. other What percentage?  Comments:  One-tenth of the course is presented mainly inside video lectures of other instructors worldwide. They illustrate the same topics that I introduced in my lectures with a different presentation. |

**B Objectives**

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| 1. What is the main purpose for this course?   * **To make them able to develop state of the art software.** * **To apply what they had learn through academic years.** * **To give student a comprehensive understanding in database and programming languages.** * **To give student good skills in networking, graphics and multimedia.** * **To give them ability to develop solutions for real life problems.** |
| 2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)   1. **Using group discussion through the internet with course attending students.** 2. **Increasing the ability of the students to submit complete project report.** |

C. Course Description (Note: General description in the form used in Bulletin or handbook)

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| **Course Description:**  The purpose is to give the student a comprehensive understanding about studied subjects through a practical project. |

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| 1. Topics to be Covered | | |
| List of Topics | No. of  Weeks | Contact hours |
| Initiation of the Project | **1** | **3** |
| Preliminary Investigation | **2** | **6** |
| Analysis | **2** | **6** |
| Designing | **2** | **6** |
| Development | **2** | **6** |
| Implementation | **2** | **6** |
| Maintenance | **2** | **6** |
| Final preparation of Project Report | **2** | **6** |

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| 2. Course components (total contact hours and credits per semester): | | | | | | |
|  | Lecture | Tutorial | Laboratory  or Studio | Practical | Other: | Total |
| Contact  Hours | **45** |  |  |  |  | **45** |
| Credit | 3 |  |  |  |  | 3 |

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| 3. Additional private study/learning hours expected for students per week.  **5**  **The private self-study of my student is crucial for this course. It includes:**   * **Reading carefully the topics in the textbook or reference book,** * **Browsing the websites that are concerned with the course,** * **Discussing the course topics with the instructor in his office hours,** * **Watching the video lectures of other instructors who presented related topics worldwide.** |

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| 4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy |
| On the table below are the five NQF Learning Domains, numbered in the left column.  **First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.) |

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| **Code**  **#** | **NQF Learning Domains**  **And Course Learning Outcomes** | | **Course Teaching**  **Strategies** | **Course Assessment**  **Methods** |
| **1.0** | **Knowledge** | | | |
| **1.1** | **Identify the main phases of developing ICT solutions** | * **Provide theoretical lectures on the concepts of graduation project** * **Provide workshops on how to write a graduation project proposal.** | | * **Weekly assignments, tasks, discussions, Project work and viva voce.** * **Talking more about their creativity and motivating them to get the best from them and finalize the project at a time.** |
| **1.2** | **Explain the requirements of developing ICT solutions** |
| **1.3** | **Illustrate processes of developing ICT solutions** |
| **2.0** | **Cognitive Skills** | | | |
| 2.1 | **Apply principles and methods of Computer Science to a wide range of applications** | | * **By giving them more time on practical such as project development.** * **By giving them real life examples and guiding them for their projects.** | **The students are assessed by:**   * **Giving them some questions that are set specifically to test this skill.** * **Giving training wherever required.** * **Discussing the project life cycle developing.** |
| 2.2 | **Analyze and compare alternative solutions to computer science problems** | |
| 2.3 | **Design and implement software systems to meet specific requirements** | |
| 2.4 | **Apply advanced algorithmic and mathematical concepts to the design and analysis of software** | |
| **3.0** | **Interpersonal Skills & Responsibility** | | | |
| 3.1 | **Think critically and creatively, both independently and with others** | | * **Project assignment** * **Group discussion** * **Presentations and examples** | * **Viva voce** * **Review of their assignments** * **Project Reports** * **Observation.** * **Self-reactive assessment.** |
| 3.2 | **Recognize the social and ethical responsibilities of a professional working in the discipline** | |
| 3.3 | **Adapt to new developments in the field of computer science** | |
| **4.0** | **Communication, Information Technology, Numerical** | | | |
| 4.1 | **Work effectively in teams to design and implement solutions to computational problems** | | * **Formation of groups** * **Debate on a given topic or project** * **Presentations** * **Question and answer sessions** | * **Assignments** * **Project work** * **Discussion.** |
| 4.2 | **Communicate effectively, both orally and in writing** | |
| **5.0** | **Psychomotor** | | | |
| 5.1 | N/A | | N/A | N/A |

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| 5. Map course LOs with the program LOs. (Place course LO #s in the left column and program LO #s across the top.) | | | | | | | | | |
| **Course**  **LOs #** | **Program Learning Outcomes**  **(Use Program LO Code #s provided in the Program Specifications)** | | | | | | | | |
| **1.1** | **2.1** | **2.2** | **2.3** | **3.1** | **3.2** | **4.1** |  |  |
| **1.1** | **√** |  |  |  |  |  |  |  |  |
| **1.2** | **√** |  |  |  |  |  |  |  |  |
| **1.3** | **√** |  |  |  |  |  |  |  |  |
| **2.1** |  | **√** |  |  |  |  |  |  |  |
| **2.2** |  |  | **√** |  |  |  |  |  |  |
| **2.3** |  |  |  | **√** |  |  |  |  |  |
| **2.4** |  |  | **√** |  |  |  |  |  |  |
| **3.1** |  |  |  |  | **√** | **√** |  |  |  |
| **3.2** |  |  |  |  |  | **√** |  |  |  |
| **3.3** |  |  |  |  |  | **√** |  |  |  |
| **4.1** |  |  |  |  |  |  | **√** |  |  |
| **4.2** |  |  |  |  |  |  | **√** |  |  |

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| 6. Schedule of Assessment Tasks for Students During the Semester | | | |
|  | Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.) | Week Due | Proportion of Total Assessment |
| 1 | Preliminary Investigation of project | 3rd | 5% |
| 2 | Analysis(project) | 5th | 10% |
| 3 | Designing(project) | 7th-9th | 10% |
| 4 | Development | 11th | 10% |
| 5 | Implementation | 13th | 10% |
| 6 | Maintenance | 14th | 5% |
| 7 | Final preparation of Project Report | 14th | 10% |
| 8 | Discussion | 15th | 40% |

D. Student Academic Counseling and Support

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| 1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)   * **Teacher is available in the office for at least 6 hours per week for any student’s consultations and academic advice apart from the time he is available in the class contact hours.** * **They can even go to my website and get information.** * **If they find any problem on a particular topic, I arrange Revision classes.** * **They can even communicate via internet through E-mails.** |

E Learning Resources

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| 1. List of Required Textbooks: in general:   * **Programming textbooks** * **Systems Analysis textbooks** * **Database books** * **Networking** |
| 2. List Essential References Materials (Journals, Reports, etc.)  **Systems Analysis and Design, Shelly and Rosenblatt, Delmar Learning,2013** |
| 3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)  **Determines as the course is going on.** |
| 4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.  **http://lms.ksu.edu.sa**  **http://fac.ksu.edu.sa/atolba** |
| 5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.  **Determines as the course is going on.** |

F. Facilities Required

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| Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.) |
| 1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)   * **Lab with all PC's connected through network and equipped with latest version of programming environments.** |
| 2. Computing resources (AV, data show, Smart Board, software, etc.)   * **E-Podium** * **Smart Board** * **Projector** |
| 3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)   * **Latest version of Software(for ex: Visual Studio 2010)** * **Antivirus** |

G Course Evaluation and Improvement Processes

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| 1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching   * **At the end of each semester the college conducts student’s feedback through a questionnaire about the teacher and the course to be filled by each student** * **Exam results** * **Students’ opinion through questionnaires.** |
| 2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department   * **Students’ feedback every semester.** |
| 3 Processes for Improvement of Teaching   * **Consider new real life problems.** * **Introduce latest tools and technology to develop projects.** * **Using modern day techniques like debate and assignments.** |
| 4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)   * **Project Assessment Committee** |
| 5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.  **Extent to which students benefit from the course especially in the practice**  **(1) to take advantage of the recommendations of the faculty members and the Committee on Learning and Teaching in the department and the Committee on the college study plans. (2) set a standard assay with similar courses in distinct universities in the world  (3) updated references and sources on a regular basis in accordance with the recent developments in the specialization.** |

Name of Instructor: **Dr Amr Tolba** (Graduation Project Coordinator)

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date Report Completed: **06/06/2017**

Name of Field Experience Teaching Staff \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Program Coordinator**: Dr. Fayez AlQahtani**

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date Received: **06/06/2017**