**TEMPLATE FOR COURSE SPECIFICATION**

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**COURSE SPECIFICATION**

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|  This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification |

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| University of Baghdad | ***1. Teaching Institution*** |
| Engineering college - Mechanical Engineering | ***2. University Department/Centre*** |
| **Engineering Drawing &** **Descriptive Geometry**This course introduces the description of phenomena associated with engineering drawing and descriptive geometry. Topics for engineering drawing covered the procedure for drawing lines and circles, be able to the geometric operation, the views, the sections, the dimensions, the Isometric, the Third view, the oblique. Topics for descriptive geometry covered Method of drawing the point in eight angle, different type of lines, different type of planes, auxiliary plane, and fid the real shape of traingle. The course is designed to provide a background to higher level courses involving drawing. The engineering drawing course is taught through 3 hrs per week and descriptive geometry course is taught through 2 hrs per week 1 theories and 1 experimental (AutoCAD) | ***3. Course title/code& Description*** |
| First year in Mechanical Engineering (ME) | ***4. Programme(s) to which it Contributes*** |
| Annual System; There is only one mode of delivery, which is a “Day Program”. The students are full time students, and on campus. They attend full day program in face-to-face mode. The academic year is composed of 30-week regular subjects. | ***5. Modes of Attendance offered*** |
| 1st & 2nd / Academic Year 2017 – 2018 | ***6. Semester/Year*** |
| 90 hrs. / 3 hrs. per week for engineering drawing and 60 hrs./ 2 hrs per week for descriptive geometry. | ***7. Number of hours tuition (total)*** |
| 22/10/2017 | ***8. Date of production/revision of this specification*** |
| ***9. Aims of the Course*** |
| The aim of this course is to introduce students the basic concepts and the use of engineering drawing and descriptive geometry in the design and manufacturing field. The students acquaint with the basic knowledge and skills in engineering drawings and the capability to read and interpret blue prints for manufacturing. The students can also develop an understanding of 2D and 3D computer aided drafting with the requirements of good engineering drawings and be able to apply them to their work |

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| ***10·Learning Outcomes***1. Be able to theLines and circles.
2. Be able to the Geometric operation.
3. Be able to the views.
4. Be able to the sections.
5. Be able to the Dimensions .
6. Be able to the Isometric.
7. Be able to the Third view.
8. Be able to the oblique.
9. Be able to draw the point descriptive and in space.
10. Be able to draw different type of line.
11. Be able to draw different type of plane.
12. Be able to draw auxiliary plane
13. Be able to draw the auxiliary plane to find the true shape of triangle
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| ***11.Teaching and Learning Methods*** |
| 1. Lectures.2. Tutorials.3. Homework and Assignments.4. Lab. Experiments.5. Tests and Exams.6. In-Class Questions and Discussions.7. Connection between Theory and Application.8. Extracurricular Activities.9. In- and Out-Class oral conservations. |
| ***12. Assessment Methods*** 1. Examinations, Tests, and Quizzes.2. Extracurricular Activities.3. Student Engagement during Lectures.4. Responses Obtained from Students, Questionnaire about Curriculum and Faculty Member (Instructor).5. Classwork marks + homework marks |
| ***13. Grading Policy:-* (100 %)** **a- For engineering drawing (70 %)**The final exam will count (30 marks) of the total course grade.The quizzes will count The homework will count (40 marks) The classwork will count **b- For descriptive geometry (30 %)**1. **Quizzes**: (20 %) - There will be (10 ) closed books and notes quizzes during the academic year. - The quizzes will count (10) % of the total course grade. - Experimental lab will count (10) % of the total course grade.2. **Final Exam: (10%)**- The final exam will be comprehensive, closed books and notes, and will take place in June 2018 from 9:00 AM - 12:00 PM in rooms ( M12 + M13 )- The final exam will count 10% of the total course grade  |

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| ***14. Course Structure*** |
| AssessmentMethod | TeachingMethod | Unit/Module orTopic Title | From a-k Article10)) | Hours | Week |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Homework Lines and circles+ exercisesPoint | ai | 53Eng. Dra. 2 Desc. Geo. | 1 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =Point | ai | 53Eng. Dra. 2 Desc. Geo. | 2 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =Point | ai | 53Eng. Dra. 2 Desc. Geo. | 3 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Quiz+ Geometric operation+ exercisesPoint | bi | 53Eng. Dra. 2 Desc. Geo. | 4 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | ExercisesPoint | bi | 53Eng. Dra. 2 Desc. Geo. | 5 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Ellipse+ exercisespoint | bi | 53Eng. Dra. 2 Desc. Geo. | 6 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Exercisesline | bj | 53Eng. Dra. 2 Desc. Geo. | 7 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Quiz + Views+ exercisesline | cj | 53Eng. Dra. 2 Desc. Geo. | 8 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =line | cj | 53Eng. Dra. 2 Desc. Geo. | 9 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =line | cj | 53Eng. Dra. 2 Desc. Geo. | 10 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Quiz + Sections+ exercisesline | dj | 53Eng. Dra. 2 Desc. Geo. | 11 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =plane | dk | 53Eng. Dra. 2 Desc. Geo. | 12 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =plane | dk | 53Eng. Dra. 2 Desc. Geo. | 13 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =plane | dk | 53Eng. Dra. 2 Desc. Geo. | 14 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Quiz + Dimensions+ exercisesplane | ek | 53Eng. Dra. 2 Desc. Geo. | 15 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Isometric+ exercisesAuxiliary plane | fl |  | 16 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | ExercisesAuxiliary plane | fl |   | 17 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =Auxiliary plane | fl | 53Eng. Dra. 2 Desc. Geo. | 18 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Third view+ exercisesAuxiliary plane | gl | 53Eng. Dra. 2 Desc. Geo. | 19 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =Auxiliary plane | gI | 53Eng. Dra. 2 Desc. Geo. | 20 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =Auxiliary plane | gl | 53Eng. Dra. 2 Desc. Geo. | 21 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =Auxiliary plane | gl | 53Eng. Dra. 2 Desc. Geo. | 22 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Quiz + Oblique+ exercisesAuxiliary plane | hl | 53Eng. Dra. 2 Desc. Geo. | 23 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =Auxiliary plane | hm | 53Eng. Dra. 2 Desc. Geo. | 24 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | =Auxiliary plane | hm | 53Eng. Dra. 2 Desc. Geo. | 25 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Total examAuxiliary plane | hm | 53Eng. Dra. 2 Desc. Geo. | 26 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Auxiliary plane | m | 53Eng. Dra. 2 Desc. Geo. | 27 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Auxiliary plane | m | 53Eng. Dra. 2 Desc. Geo. | 28 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Auxiliary plane | m | 53Eng. Dra. 2 Desc. Geo. | 29 |
| 1 – 5 of article (12) | 1 – 9 of article (11) | Auxiliary plane | m | 53Eng. Dra. 2 Desc. Geo. | 30 |

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| ***15. Infrastructure*** |
| * Engineering drawing (abd al- rasool al-khafaf)
* Machine drawing (S.C. SHARMA)-Standard lisheDistributors – f first edition 2004.
* Graphics for engineers (JAMES H. EARLE) –Addison Wesley Pub Company- second edition 1989.
* Descriptive engineering by Midhat Fadeel
* Descriptive engineering by Ammanoual
 | Required reading:· CORE TEXTS· COURSE MATERIALS· OTHER |
| Laboratory experiments in the ( auto CAD Lab) of the department.Available websites related to the subject.Extracurricular activities. | Special requirements (include forexample workshops, periodicals,IT software, websites) |
| Field and scientific visits.Extra lectures by foreign guest lecturers. | Community-based facilities(include for example, guestLectures , internship,field studies) |
| ***16. Admissions*** |
| First class | Pre-requisites |
| 60 | Minimum number of students |
| 90 | Maximum number of students |
| **Hussein Yousif Mahmood**Mech. Engr. Dept. /Thermo-FluidsCollege of Engineering :University of BaghdadTel: 07901803967Hussain\_ yousif 2001@yahoo.com**Dr. Ibtehal A. Sadiq**Lecturer of Mechanical Engineering /Applied mechanicsMech. Engr. Dept.College of EngineeringUniversity of BaghdadTel: +00964-7901857636Email: ebtihalabas@yahoo.com; | ***17. Course Instructors*** |

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