Course specification

University/Academy: Damanhour University
Faculty/Institute: Science
Department: Mathematics

1. course Data:

<table>
<thead>
<tr>
<th>Course code:</th>
<th>Course title:</th>
<th>Academic year/level:</th>
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<tbody>
<tr>
<td>Stat350</td>
<td>Theory of Probability</td>
<td>2009-2010</td>
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<tr>
<th>Specialization:</th>
<th>No. of instructional units:</th>
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<tbody>
<tr>
<td>Special Mathematics</td>
<td>lecture 2</td>
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2. course Aim

Demonstrate theoretical knowledge and have practical skills and personal attributes and competencies that will be required for Probability position in the international statistic.
Demonstrate an ability to initiate and sustain in-depth research relevant to Probability. Have an opportunity to put theory into practice via work-based learning.

3. Intended learning outcome

a) Knowledge and understanding

a1. Recognize the nature and operations of Probability.

a2. Identify familiarity with theories and concepts used in the Probability.

a3. Define the domestic and international nature and dimensions of Probability.

a4. Discuss the structure and organization of the public and private sectors of the Probability.

a5. Translate the factors which influence the development of organizations operating in the Probability field and the most appropriate ways to manage this development.

a6. Identify the steps required to carry out a piece of
research on a topic within Probability

| b) Intellectual skills | b1. Apply appropriate theories, principles and concepts relevant to the Probability.
 | b2. Assess and evaluate the literature within Probability.
 | b3. Demonstrate a reasoned argument to the solution of familiar and unfamiliar problems relevant to Probability. |

| c) Professional skills | c1. Plan practical activities using techniques and procedures appropriate to Probability.
 | c2. Conduct a piece of independent research using Probability media and techniques. |

| d) General skills | d1. Deal with an appropriate effective data relevant to Probability.
 | d2. Work effectively as part of a group, involving leadership, group dynamics and interpersonal skills such as listening, negotiation and persuasion relevant to Probability.
 | d3. Communicate with organization skills (including task and time management) relevant to probability both individually and in a group situation.
 | d4. Use ideas and techniques some of which are at the forefront of the discipline.
 | d5. Acquire the ability to self appraise and reflect on practice relevant to Probability. |

| 4. course content | 1-Joint and conditional distributions
 | 2-Joint expectations and moments.
 | 3-Covariance and correlation coefficient.
 | 4-Conditional expectation.
 | 5-Independence of random variables. |
| 5. Teaching and learning methods | 5.1 Lectures.  
| | 5.2 Tutorials  
| | 5.3 Homework  
| | 5.4 Oral discussion  
| 6. teaching and learning methods for students with special needs | Non  
| 7. Student Assessment | a. Procedures used: Final exam  
| | b. Schedule: Assessment 1 Final exam Week 15  
| | c. Weighing of Assessment: Final exam 100 Marks (100%)  
| 8. List of Textbooks and References: | a. Course Notes Course notes provided by the staff member of Math department, to be handed at the beginning
of the semester.

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<tr>
<td>c. Recommended Books</td>
<td>None</td>
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<tr>
<td>d. Periodicals, web sites,…,etc</td>
<td>None</td>
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**Course Instructor:** Dr. Kadria Hawash

**Head of Department:** Dr. Ragab Omar Abd El-Rahman

**Date:**  /  /  