#### Course Title: Agronomy 3 (crop production)

|  |  |
| --- | --- |
| **University** | **Benha** |
| **Faculty** | **Faculty of Agriculture** |
| **COURSE SPECIFICATIONS:** |
| Program of which the course is given | Biotechnology  |
| Major or Minor element of program | -- |
| Departments offering the program | General  |
| Department offering the course | Agronomy |
| Academic year (level) | 2nd level  |
| Date of specification approval | --/--/2015 |

|  |
| --- |
| **A- BASIC INFORMATION**  |
| Title  | Agronomy 3 |
| Code | **AG 0103** |
| Credit Hours  | **3 CREDIT HOURS** |
| Lecture | 2 Hours / week |
| Practical | 2 Hours / week  |
| Total: |  Hours |

|  |
| --- |
| **B- PROFESSIONAL INFORMATION** |
| 1. OVERALL AIMS OF COURSE |
| The aim of the course is to understand the importance of field crops and their role in fulfilling the basic needs for human consumption and animal feeding, studying the environmental requirements for economic crops in Egypt, studying the cultural practices for economic crop groups pre-and post-harvest including sowing methods, fertilization, irrigation, weed control, harvesting processes. |

|  |
| --- |
| 2. INTENDED LEARNING OUTCOMES OF COURSE (ILOs) |
| **A. Knowledge and Understanding:** |
| ***By the end of the course, students should:**** Identify crops and its uses
* Understand the importance of field crops and their role in fulfilling the basic needs for human consumption and animal feeding.
* Recognize the environmental requirements for economic crops in Egypt
* Know the cultural practices for economic crop groups pre-and post-harvest
 |

|  |
| --- |
| B. Intellectual Skills: |
| ***Successful completion of this course will allow students to:**** Defferentiate the crops planting methods
* Determine crop fertilizer needs
* Describe the soil and climatic requirements of crop production
* Explain the cultural practices of crop production
 |
| C. Professional and Practical Skills: |
| * To be able to assist growers and to solve crop management problems
* To design a report and presentation on crop topics as harvest, quality analysis, varietal performance.
* To be able to develop an international opinion on crop production.
* To be able to manage the complexity of a crop production system
 |
| D. General and Transferable Skills: |
| * To be able to working with Others
* To be able to problem Solving
 |

|  |
| --- |
| 3. CONTENTS |
| **Topic** | **No. of hours** | **Lectures** | **Practical** |
| 1. The economic Importance of different field crops.
 | 2 | 1 | 1 |
| 1. Relationship between environment factors (biotic and abiotic) and agricultural practices in crop production.
 | 2 | 1 | 1 |
| 1. Botanical description of field crops.
 | 12 | -- | 6 |
| 1. Appropriate cultural practices of different field crops, including: wheat, rice, maize, faba bean, clover, cotton. flax, soybean, peanut, sugar cane and sugar beet.
 | 24 | 12 | 6 |
|  |  |  |  |

|  |
| --- |
| 4. TEACHING AND LEARNING METHODS |
| Lectures, Practical classes, fieldwork and group work. |

|  |
| --- |
| 5. STUDENT ASSESSMENT METHODS |
| ***Students will be evaluated by attendance, fulfillment and effort in exercises and presentations, and examination grades:**** Periodical exam
* Practical exam
* Oral exam
* Final exam
 |

|  |
| --- |
| 6. ASSESSMENT SCHEDULE |
| No | AssessmentAssessment | **Week** |
| 1 | Periodical exam  | 6th and 12th  |
| 2 | Practical exam | 15th  |
| 3 | Oral exam | 15th  |
| 4 | Final exam | 16th  |

|  |
| --- |
| 7. WEIGHING OF ASSESSMENT |
| No | AssessmentAssessment | **%** |
| 1 | Periodical exam  | 15% |
| 2 | Practical exam | 15% |
| 3 | Oral exam | 10 % |
| 4 | Final exam | 60 % |
| TOTAL | 100 % |

|  |
| --- |
| 8. LIST OF REFERENCES |
| 1. **Kassem. A.A., Omar, M.A and Nowar, A.I. 2007**. Production of field crops. (*in Arabic*). El-Fateh print. & Purplish. Co., Alexandria. Egypt. <http://books.google.de/books?id=zL86AAAAMAAJ&q=Production+of+field+crops&dq=Production+of+field+crops&hl=en&sa=X&ei=Mjz3Uv_JKsTnswbkuYGIBQ&ved=0CDUQ6AEwAQ>
2. **Martin, J.H., leonard,W.H., Stamp, D. and Waldren, R. 2005**. Principles of field crop production. 4th Ed. Printice-Hall, UK.

<http://books.google.de/books?id=zS0hAQAAMAAJ&q=Principles+of+field+crop+production&dq=Principles+of+field+crop+production&hl=en&sa=X&ei=RDz3UouMHJKHswbCwICgAw&ved=0CC4Q6AEwAA> 1. **Smith, D. L. and Hamed, C. 1999**. Crop yield, physiology and processes. Springer-Verlag, Berlin Heidelberg, Germany.

<http://books.google.de/books?id=dpsOr62_l6wC&printsec=frontcover&dq=Crop+yield&hl=en&sa=X&ei=Vzz3Ut3yGIqJtQb-oYGABg&ved=0CFsQ6AEwCA#v=onepage&q=Crop%20yield&f=false> |

|  |
| --- |
| 9. FACILITIES REQUIRED FOR TEACHING AND LEARNING |
| 1. Teaching aids/materials: e.g. boards – overhead projector – data-show projector – stationary.. etc.
2. Teaching room/hall.
3. Computers.
4. Facilities for site visits etc., which are necessary for teaching the course.
 |

|  |  |
| --- | --- |
| **Course Coordinators:**  | **Prof. Dr. Nasser Khamis El-Gizawy** |
| **Date: / / 2015** |