Modesto Junior College
Course Outline of Record

AGEC 55

I. OVERVIEW
The following information will appear in the 2012 - 2013 catalog

AGEC 55 Preparatory Agriculture Computer Applications 3 Units
Formerly listed as: AGEC - 55: Preparatory Agriculture Computer Appl

Introduction to computer use in the workplace, emphasizing agribusiness situations, use of computer applications software, including word processors, spreadsheets, and databases. Suitable for those with no previous computer experience.

Field trips are not required. (A-F or P/NP - Student choice) Lecture /Lab

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

a. Getting to know the computer
   i. Orientation to equipment and set-up
   ii. Terminology
   iii. Loading a program
   iv. Using a program
   v. File processing
   vi. Trouble-shooting problems

b. Review and evaluation of office operations programs in agriculture
   i. Letters
   ii. Phone/mailing lists
   iii. Reports
   iv. Check-writing

c. Review and evaluation of electronic spreadsheets for agriculture
   i. Best crop selection
   ii. Livestock feeding
   iii. Livestock production planners
   iv. Cash flow summaries
v. Net worth and inventories  
vi. Agriculture operation models  
vii. Agriculture budgets  

d. How to buy a computer  
i. Hardware for various agriculture applications  
ii. Agricultural software  
iii. Structured individual projects  

2. **Required Lab Content:**

a. Review and evaluation of electronic spreadsheets for agriculture  
i. Best crop selection  
ii. Livestock feeding  
iii. Livestock production planners  
iv. Cash flow summaries  
v. Net worth and inventories  
vi. Agriculture operation models  
vii. Agriculture budgets  

3. **Recommended Content:**

a. Miscellaneous software packages  
i. Agriculture telecommunications  
ii. AgriData Resources/AgriStar Information Network  
iii. AgNet Information Network  
iv. Doanes Agriculture Information Services  
v. Nowcasting Agriculture Weather Program  
vi. Dairy herd management  
vii. Other time-sharing and network systems  

b. Other software packages  
i. Database applications in agriculture  
ii. Crop management package
iii. Agriculture accounting systems
iv. Agriculture management decisions
v. Economics of an agricultural enterprise
vi. Cash crop projections
vii. Least cost ration formulation

c. Other software packages
   i. Other agriculture software
   ii. Soil test recommendations
   iii. Liquid manure and fertilization and application rates
iv. Field size and population density
v. Crop history
vi. Weed control modeling and statistics
vii. Land leveling
viii. Heat detection in cattle

B. HOURS AND UNITS

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<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
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C. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Lectures and use of visual aids.
2. Presentation by industry experts in regard to agribusiness computer applications.
3. Small group discussion coupled with interactive computer use reinforcing lectures and demonstrations.
4. Supervise student practice on demonstration software.
5. Assign collaborative and individual projects.
6. Facilitate examination of representative word processing, spreadsheet, database and power point programs.

D. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS

   Time spent on coursework in addition to hours of instruction (lecture hours)
a. Daily homework assignment that reinforces the lecture component, approximately 1 hour to complete (total 30 hours)

b. Bi-weekly section projects, capstone exercises that reinforce the section, approximately 5 hours to complete (total 75 hours)

c. Semester project, course capstone project that reinforces and show proficiency over the topics learned during the semester. Approximately 15 hours to complete.

2. **EVIDENCE OF CRITICAL THINKING**
   Assignments require the appropriate level of critical thinking

   a. Create a portfolio for a new business
      i. Research the business type on the Internet
      ii. Find a suitable location for the business using the Internet
      iii. Create financial reports, forecasting income and expenses (cash flow)
      iv. Create an Income statement
      v. Create a presentation about the business

   b. Using the Internet, research agriculture business and computer applications.

   c. Analyze agriculture periodicals relative to agriculture business and computer applications.

E. **TEXTS AND OTHER READINGS (TYPICAL)**

1. Other: Internet sites and handouts as deemed appropriate by instructor.

III. **DESIRED LEARNING**

A. **COURSE GOAL**
   As a result of satisfactory completion of this course, the student should be prepared to:

   perform simple research on the internet, have a basic familiarity of computer hardware, and create simple documents, spreadsheets, and operate a database. This course prepares students for success in Agricultural Computer Applications - 225.

B. **STUDENT LEARNING GOALS**
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**
   Upon satisfactory completion of this course, the student will be able to:

   a. Demonstrate the operation of the personal computer.

   b. Evaluate a variety of useful software.

   c. Apply software to agricultural situations.

   d. Evaluate and select software.

   e. Choose hardware appropriate for individual agriculture businesses.

   f. Apply international and national agricultural networks to agricultural classes.
g. Evaluate the importance of computer applications as a management tool for agriculture businesses.

h. Complete projects that will demonstrate their ability to use personal computers in agricultural applications.

2. **Lab Learning Goals**  
   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*
   
a. Complete projects that will demonstrate their ability to use personal computers in agricultural applications.

b. Develop a program that will assist in some facet of managing an agribusiness.

## IV. METHODS OF ASSESSMENT (TYPICAL)

### A. FORMATIVE ASSESSMENT

1. In class objective examinations that test understanding of commonly used computer terminology.

2. Participation in classroom activities that will determine proficiency in the use of word processing, spreadsheets, multimedia presentations, and databases.

3. Evaluation of student ability to utilize the Internet for agriculture business and computer application research.

### B. SUMMATIVE ASSESSMENT

1. Out of class assignments that utilize Microsoft Word, Microsoft Access, Microsoft Excel, and Microsoft PowerPoint

2. Evaluation of portfolio