SYLLABUS
Ag Science 332—Vegetable Production
Spring 2009

Lecture/Lab: TH 3:30-5:20 p.m., W 4:30-5:20 (may be adjusted)
TSU Farm + field trips as arranged; occasionally MG2030 as arranged

Instructor: Dr. Steve Salt
Office:
Office Phone: best to call me at home
Home phone: (660) 332-7217 (Please, no calls before 7 a.m. or after 10 p.m.!)
E-mail: saltsgvf@missvalley.com (preferred) or ssalt@truman.edu mailto:ssalt@truman.edu

Texts (required): Producing Vegetable Crops, 5th ed. by Swiader and Ware (ISBN 0-8134-3203-0)
Knott's Handbook for Vegetable Growers, 5th ed. by Maynard (ISBN 0-4717-3828-X)

other materials may be placed on reserve in the library

Special Needs: If you have special needs as addressed by the Americans with Disabilities Act, please contact your instructor immediately. Reasonable efforts will be made to accommodate your special needs.

Office hours: to be announced

Purpose of the course: This course is designed to help agricultural science major and other interested students to gain an appreciate and understanding of. vegetable crops, broadly defined--especially their biology and techniques of cultivation, harvest, storage, sale and use.

Course structure: This course will consist of a mixture of lectures, in-class exercises and activities, question and answer sessions, out-of-class assignments, laboratories, and field trips.

Tentative schedule of course topics (subject to revision as the semester progresses)

Unit 1: Introduction to vegetables; their biology and ecology
6 periods
Exam 1 period (tentatively Jan.29)

Unit 2: Vegetable production tools and techniques
6 periods
Exam 1 period (tentatively Feb. 17)
Research paper presentations: 1 period (tentatively Feb. 19)

Unit 3: Major vegetable crops of North America
8 periods
Exam: 1 period (tentatively March 17)
Research paper presentations: 1 period (tentatively March 19)

Unit 4: Lesser and specialty vegetable crops and herbs
7 periods
Exam 1 period(tentatively April 7)
Research paper presentations: 1 period (tentatively April 9)

Unit 5: Harvesting, storage, marketing and uses of vegetable crops
6 periods
Exam 1 period(tentatively April 28)

Semester Project Presentation–at Final Exam scheduled time

Evaluation and grading: Evaluation will be by means of mid-term exams, three research paper-presentations, a comprehensive final examination, lab reports, and a semester report-project.

A≥90.0%, B=80.0-89.9%, C=65.0-79.9%, D=50.0-69.9%, F<50.0% of possible points

Tentative distribution of grading points (may be adjusted during semester)

Unit Exams	4x100pts	400 pts (actually take 5 exams; drop lowest score)
Semester report-project		150 pts (due a week before end of semester)
Lab reports	variable pt value	approx. 200 pts
Research paper-presentations	3x100 pts	300 pts
		approx. 1100 pts

Academic honesty: Dishonesty in schoolwork effectively defeats the purpose for which the work is done and may unfairly penalize fellow students. Dishonesty in any form, be it cheating on exams, plagiarism in reports, unauthorized collaboration on outside assignments, etc. will be dealt with strictly and penalties may range up to failure of the course and report to the Vice-President of Academic Affairs for discipline which may include suspension or dismissal from school.

The course instructor reserves the right to provide further information and also to modify any and all components of the course structure given above as he deems necessary as the semester progresses. Any substantive changes will be both announced and provided in written hand-out form in class. ***However, the student is responsible to attend class in order to receive any such announcements or hand-outs, and will be held accountable for their contents whether or not he or she is present in class when they are provided.***

AGSC 332 Veg Crops
Semester Project and Report
Spring 2009

Name:

Design Your Own Veg home garden / market garden / small farm operation

*Location: as precisely as possible; county/town/township, address and/or legal description, route to get to it

*Lay-out / diagram / map of garden/field (to scale, with immediate surroundings, also compass orientation, slopes, aspect, infrastructure, etc.):

*Type of planned operation: Casual kitchen garden? Serious home food production? You-pick commercial? Market garden for farmers' market? For CSA? For roadside stand? For restaurants? For wholesale sales to groceries? Mixed operation?

*Detailed descriptions and analysis of :

A. *Motivation*–why do you want to do this? Please be honest, realistic.

B. *Goals*–what do you hope to achieve--in measurable, quantitative terms? What would constitute success and how would you measure it? Are specific *outputs* needed–what when, how much?

C. *Estimation of resources needed to achieve* B.
site–size and shape, soil, climate, water, light, nutrients, aspect and slope, current use/vegetation, prior use history, legal ownership and rights of use, location and quality of infrastructure, distance/convenience to sources of inputs and markets or uses of products.
skills/knowledge–
energy, health, physical capabilities–
TIME–
commitment–
social relationships·
labor–
$$$–
seeds/plants–
tools and equipment–
containers–
fertilizers, lime, compost, other nutrient inputs–
pesticides, other pest control technologies–
structures–
infrastructure (roads, paths, water, electricity, fences, etc)--
transportation–
storage, processing space/facilities–
marketing facilities, equipment/tools, containers, etc.–
appropriate clothing, protective and safety equipment, supplies, etc.
anything else that may be needed to carry out your proposed enterprise

*D. *Inventory of available resources*–similar in format to C.

*E. *Comparison of C. and D. Identify areas of unmet needs and obstacles.*
*F. *Reconciliation of* E. *with* B, C. *Revisions of* B. *or identification of ways to muster additional resources for* C. *or overcome obstacles in order to achieve goals.*

*G. *Operational Plan--What...when...where...how...who...how much.* ***Calendars, flow charts and spatial diagrams may help.***

Selection of crops–botanical adaptation, intended uses, convenience, cost of production, adaptation to site, marketability or desirability for personal use

Obtaining seeds, plants

Site preparation–tillage, fertilization, pre-plant weed control,

Planting: seeding, transplants–self-grown or purchased, perennial plants, cuttings

Maintenance– irrigation and drainage, climate control–frost, cold, heat, wind, sunburn; weed control; pest and insect and disease control, light management, pollination, fertilization, hormone treatments, etc.

Companion, succession, and rotational planting; intercropping; monoculture, etc.

Labor–who, when, how long, responsibilities

Money–sources, how much, when needed

Equipment–scheduling, when, where; maintenance

Harvesting, storage, processing, marketing or use

Cleaning up

Maintenance/repair of tools, equipment

Record-keeping

Evaluation

Etc.

*H. *Projected Production*

When, how much, for all crops

*I. *Projected Uses of Production*

Storage, shipping, marketing, preservation/processing, cooking or other food preparation

*J. *Projected expenses/costs (either commercial or hobby) and labor needs*

*K. *Projected income and profit/loss* (if commercial)

*L. *IMPORTANT: Overall appraisal of feasibility, benefits/costs of proposed project.*

*M. *Anything else you think may need to be in your plan / report.*

*<u>Sources of information, supplies and tools, seeds, etc.</u>