SOUTH SEATTLE COMMUNITY COLLEGE

COURSE OUTLINE
Developed by Stephen Sparks CEC,CCE
October 1, 2003

DEPARTMENT:	Culinary Arts
CURRICULUM:	Wine Technology
COURSE TITLE:	Wine Chemistry and Microbiology
COURSE NUMBER:	WIN 122
TYPE OF COURSE:	Lecture
COURSE LENGTH:	Quarter
CREDIT HOURS:	3
LECTURE HOURS:	22
LAB HOURS:	22
CLASS SIZE:	20
PREREQUISITES:	Introduction to Chemistry, Introduction to Enology (WIN 101), Enology Laboratory Analysis (WIN 102)(or concurrent enrollment) or permission of instructor.

COURSE DESCRIPTION:

Wine chemistry and microbiology including wine acidity, sulfur dioxide, protein and phenolic equilibria and other basic chemical and microbiological concerns. Students learn how to make informed decisions on style, crush options, cellar practices, fining, stabilization and quality assurance.

STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication – Speak and write effectively for personal, academic and career purposes.
2. Computation – Identify, interpret, and utilize higher level mathematical and cognitive skills

STUDENT LEARNING OUTCOMES ADDRESSED: (cont.)

3. Critical thinking and problem solving – Think critically in evaluating information, solving problems and making decisions.
4. Personal responsibility – Be aware of civic and environmental issues.
5. Information literacy – Access and evaluate information from a variety of sources and contexts, including technology.

GENERAL COURSE OBJECTIVES:

At the end of the course the student will:

-State the interrelationships in key aspects of wine chemistry
-State the effects of wine chemistry variables on sensory traits
-Make informed decisions of style
-Utilize information on wine acidity, pH and other chemistry variables
-Propose chemical additions
-Evaluate laboratory reports
-Investigate questions of importance in winemaking

TOPICAL OUTLINE:	APPROX. HOURS
-Review of laboratory techniques and chemistry	5
-Review of basic laboratory tests used in winemaking	5
-Wine acidity	4
-pH interactions	5
-Chemistry of sulfur dioxide	3
-Protein and phenolic equilibria	4
-Integration of chemical interactions	3
-Decisions concerning wine style	3
-Applied wine microbiology	3
-Microorganisms in winemaking	3
-Enhancement of beneficial microorganisms	4
-Control of undesirable microorganisms	2
TOTAL	44

DEVELOPED BY: Stephen Sparks CEC, CCE
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