



# University Programs in Sensory Evaluation

Rebecca N. Bleibaum

Secretary, Society of Sensory Professionals

Instructor, UC Davis Extension

Vice President, Tragon® Corporation

[www.tragon.com](http://www.tragon.com)

(800) 841-1177

# Where are we?

Sensory evaluation has been taught in universities for over 60 years.

- How many universities offer sensory evaluation?
- Which courses are being offered?
- How many students are taught each year?
- In which departments are they being offered?
- Is this sufficient?
- If not, what should we do about it?



# Summary of USA Sensory Programs



## IFT Guidelines for Sensory Evaluation

Understand basic principles of sensory analysis

50 Approved Food Science programs

30 Universities offer Sensory Courses

40 Sensory Courses are taught each year

- 60% Undergraduate
- 30% Graduate
- 10% Distance Learning

*Estimates of over 600 students receive some sensory training each year.*

USA Universities Only (*sorry!*); there are probably more . . .

## Sensory is Widely Taught in Food Science Programs

University of Arkansas  
University of California, Davis  
Brigham Young University  
Cal Poly San Luis Obispo  
Chapman University  
Cornell University  
Fresno State University  
University of Illinois  
University of Georgia  
Iowa State University  
Kansas State University  
Louisiana State University  
Michigan State University

University of Minnesota  
Mississippi State University  
North Carolina State University  
Ohio State University  
Oregon State University  
Penn State University  
Purdue University  
Rutgers University  
University of Tennessee  
Texas A&M University  
Virginia Tech  
University of Wisconsin  
Utah State University

## Typical Sensory Course Titles

Many also have “Food” in Title

Introduction to Sensory Evaluation

Descriptive Analysis

Consumer Evaluation

Advanced Concepts/Sensory

Sensory & Instrumental Evaluation

---

Understanding Flavor of Wine/Beer

Dairy Product Sensory Evaluation

Practicum in Sensory Evaluation

# UC Davis

## Sensory Science Courses

### Food Science & Technology

- FST 107 Food Sensory Science
- FST 117 Design & Analysis for Sensory Food Science
- FST 127 Sensory Evaluation of Food
- FST 207 Advanced Sensory-Instrument Analysis
- FST 217 Advanced Food Sensory Science
- FST 227 Food Perception & the Chemical Senses

### Viticulture & Enology (Wine Science)

- VEN 125 Wine Types and Sensory Evaluation
- VEN 215 Sensometrics
- VEN 225 Advanced Sensory Analysis of Wines

## Example Program -- UC Davis, B.S. and/or M.S. in Food Science Food Sensory Science Emphasis

### Undergraduate

- Food Sensory Science
  - Sensory Evaluation of Food
- 

### Graduate

- Food Sensory Science
- Sensory Evaluation of Food
- Advanced Sensory-Instrument Analysis or Advanced Sensory Analysis of Wines

## UC Davis, Ph.D. in Food Science, Sensory Science Emphasis

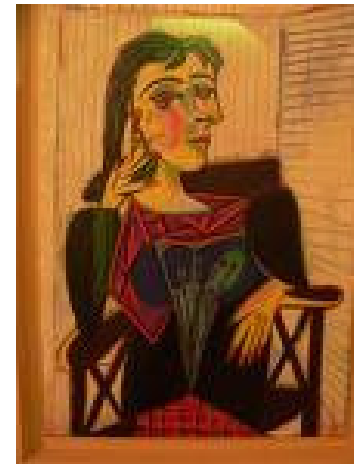
### Ph.D.

- Sensory Evaluation of Food
- Advanced Food Sensory Science
- Advanced Sensory-Instrument Analysis or Advanced Sensory Analysis of Wines
- Food Perception & the Chemical Senses
- Graduate course in physiology or nutrition
- Graduate course in statistics
- Course in psychology (excluding statistics)





What's wrong with this picture?



www.tragon.com  
(800) 841-1177

Why is this insufficient?

## Sensory is an Applied Science

For starters . . .

- Most professionals discover sensory evaluation after they leave college
- Sensory is much broader than Food Science
- Courses vary greatly in their definition of Sensory Evaluation
- Little or outdated business applications experience

How many professionals in SSP have received University level training?



How do we begin to address these issues?

[www.tragon.com](http://www.tragon.com)  
(800) 841-1177

# UC Davis Distance Learning Program

Thanks to Dr. Howard Schutz's vision, in 2000, work began on the UC Davis program:

## *Sensory Science and Consumer Testing Certificate Program for Distance Learners\**



Our goal was to develop a program that addressed many issues

University Level

Provide a Scientific Foundation

Beyond Food and Beverage

Easy Access for Working Professionals

Strategic Business Applications

Global

*\* Applicants must have a Bachelor's Degree, a course in statistics, and a complete application*

What is the program?

A full year of misery – UC Quarter System

Foundations of Sensory Science

Sensory Evaluations Methods

Consumer Testing Methods

Applications of Sensory Evaluation and Consumer Testing

Courses include:

Weekly Lessons & Readings

Homework Assignments with Instructor Feedback

Bi-weekly Quizzes & Proctored Final Exam

Discussion Forum

What is the program?

## Curriculum Sampling from Applications Course

### Applications of Sensory Evaluation and Consumer Testing

- Product Development Principles
- Quality Control and Stability
- Product Improvement
- New Product Development
- Product Optimization
- Post Marketing Activities
- Legal Issues and Advertising Claims
- Resources and Issues
  - List of sensory companies, books, journals, conferences, etc;
  - How to develop supplier relationships
- Future of Sensory Science

## UC Davis Certificate Program

### Am I Certified?

#### No; Certification Requires:

Assessment that recognizes and tests knowledge

Professional experience

Awarded by a third-party, standard-setting organization, typically not for profit

Indicates mastery/competency versus standards, usually by application or exam

---

*Standards set through industry-wide process*

*Typically results in credentials*

*Has on-going educational requirements*

What have we accomplished in the past 7 years?

## Global Impact

In the past two years alone, students from over 20 countries have participated.

Austria	South Africa
Singapore	France
Canada	Germany
Australia	The Netherlands
United States	New Zealand
Finland	United Kingdom
Colombia	Costa Rica
Faroe Islands	Mexico
China	Brazil
Ecuador	
Japan	



## What have we accomplished in 7 Years?

### Well trained sensory professionals

Over 250 students trained

Over 25 countries have participated

We are teaching teachers

### What we know about our students:

- Increases knowledge, confidence, and career satisfaction
- Students are sought by recruiters and companies
- Globally, we are having an impact

What's next?



[www.tragon.com](http://www.tragon.com)  
(800) 841-1177

What should SSP do?

*IMHO*

Partner with ASTM to develop targeted materials available for download

Develop a sensory certification program

Develop a basic sensory lecture series:

- “Introduction to Sensory”
- “Business Applications of Sensory”, etc.

Provide sensory education outreach programs

- Rotating list of guest lectures by region
- Offer scholarships for instructors in developing countries

Coordinate internships for students and instructors

Develop simple science experiments that illustrate sensory techniques



*Thank You!*

Howard Schutz – UC Davis  
Jeannine Delwiche - Firminich  
Jeff Misuraca – Tragon Corporation

[www.tragon.com](http://www.tragon.com)  
(800) 841-1177