University Programs in Sensory Evaluation

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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

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Typical Sensory Course Titles
Many also have “Food” in Title

- Introduction to Sensory Evaluation
- Descriptive Analysis
- Consumer Evaluation
- Advanced Concepts/Sensory
- Sensory & Instrumental Evaluation

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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?
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?
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  
Singapore  
Canada  
Australia  
United States  
Finland  
Colombia  
Faroe Islands  
China  
Ecuador  
Japan  

South Africa  
France  
Germany  
The Netherlands  
New Zealand  
United Kingdom  
Costa Rica  
Mexico  
Brazil
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?
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

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