BCBT 100 – Welcome!

Class organization, logistics

Science of Cooking – BCBT100
Fall 2016 – Bodwin/Tigges

Dr. Bodwin Info

Dr. Bodwin
bodwin@mnstate.edu
www.drbodwin.com/teaching
D2L Brightspace
@DrBodwin (twitter)

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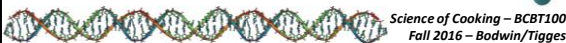*Fall 2016 – Bodwin/Tigges*

Philosophy of Class

LASC 3 with Lab
  Employ a scientific approach to food, flavor, and cooking
Lab/Experiential activities
NOT a cooking class, a science class about food and cooking

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Grading

D2L quizzes
Lab assignments
Participation in D2L discussions
Exams

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Course Information

Come to class
D2L
http://www.drbodwin.com/teaching/bcbt100.php
Blog http://scienceofcooking100.blogspot.com/
Twitter @DrBodwin #ChemKitchen
Office Hours (check schedule)

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What will we cover?

"Matter and its changes"
Food molecules
Cooking methods
Food production
Experiencing food

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Food Categories

Animal-based Foods
Dairy, eggs, cheese, meat

Plant-based Foods
Fruit, veg, seeds, "other"

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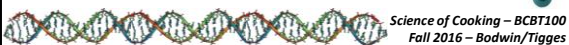*Fall 2016 – Bodwin/Tigges*

Cooking/Preparation

Heating methods

Other methods

Growing/raising food

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What is "science"?

Curiosity
Organization
Data
Relationships

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The Scientific Method

Observe something
Ask a question
Predict an answer
Test your prediction
Repeat, repeat, repeat

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Doing "Good" Science

It's not random
Testable prediction
Statements not questions
1 variable at a time
Reflective

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What is "cooking"?

Preparation of food & drink
Understanding flavors
Exploring combinations
Experiencing textures

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Sciences of Cooking

Biology
Plant & animal tissues
Microbiology

Chemistry
Change
Structure
Interactions

Food and Cooking

Engineering
Processing
Textural
Applied physics

Physics
Energy Transfer
Change
Matter

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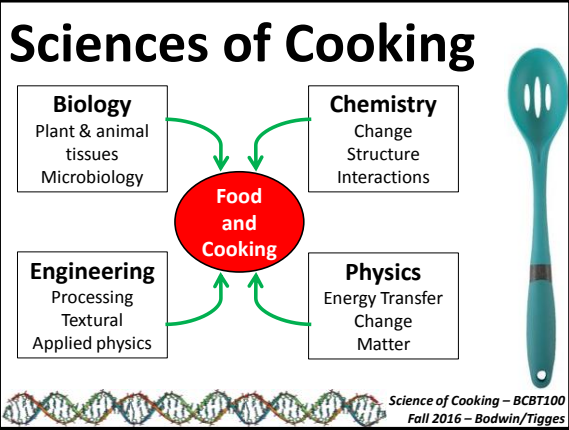
Using recipes

More than a list of ingredients

Process matters

What's happening on a molecular level?

How can a recipe be changed?

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In-Class Assignment

Name, DragonID

What did you have for breakfast?

On the back, list the 3 topics you are most interested in discussing in class.
Type of food, cooking technique, science topic, etc.

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