

SCIENCE & COOKING

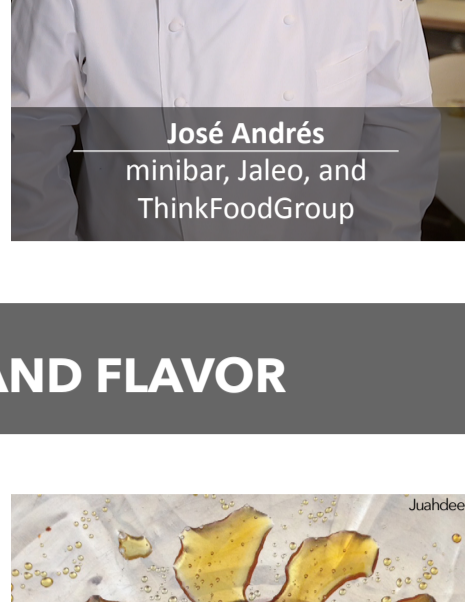
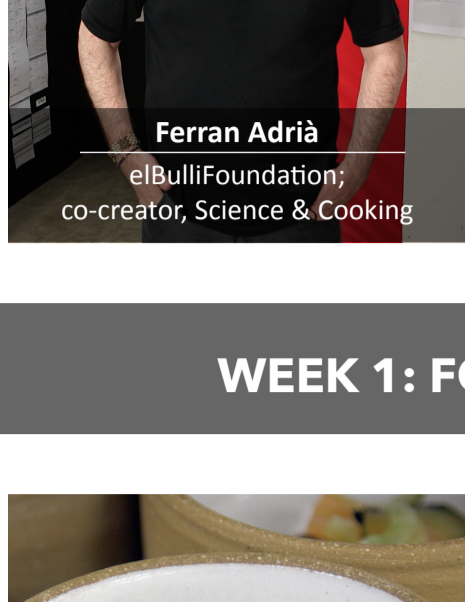
The course is divided into 10 weeks, each focusing on a scientific topic related to cooking. Every week includes interactive video lectures, a homework and a lab which you will do in your own kitchen. Toward the end of the course you will also conduct your own scientific study of some recipe or aspect of cooking.

For each week we will post recommended readings from Harold McGee's amazing treatise [On Food and Cooking](#). This will significantly enhance your understanding of this subject and serve as a truly invaluable resource and reference, both for this class and beyond.

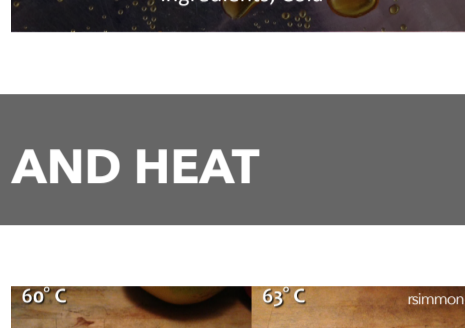
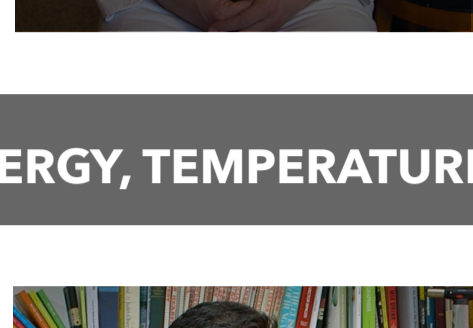
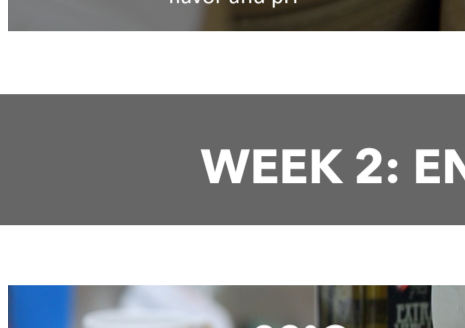
You can also read more about the material in the [Course Companion \(also available on iTunes here\)](#). This text focuses more specifically on the science covered in this course and you may find it helpful for reviewing material and doing the homework.

Below is an overview of the ten weeks of the course.

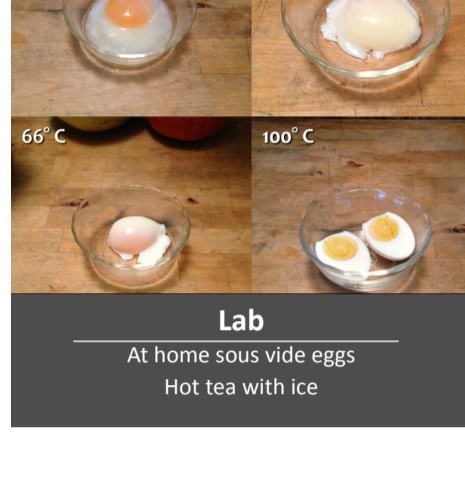
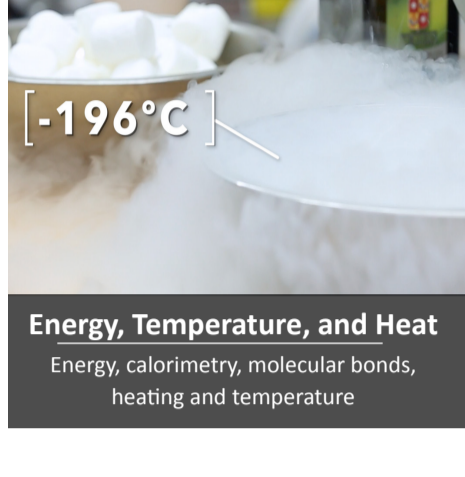
COURSE WELCOME AND OVERVIEW



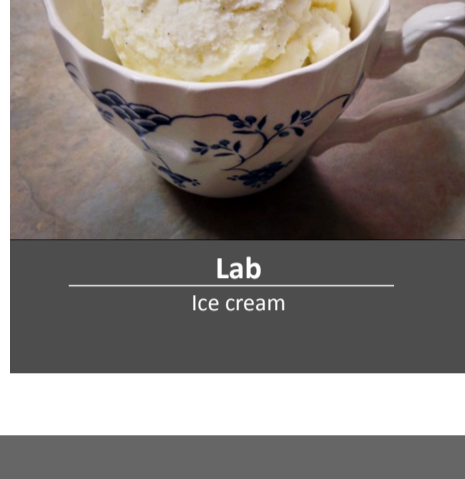
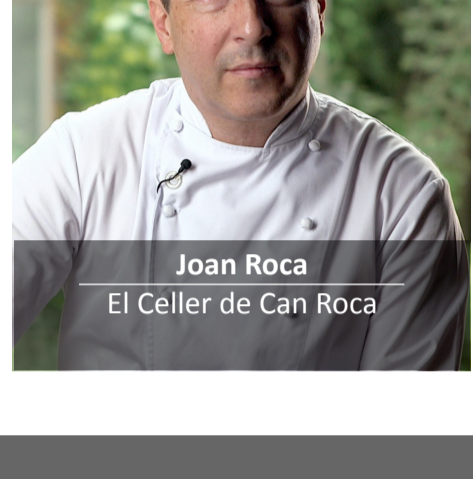
WEEK 1: FOOD COMPONENTS AND FLAVOR



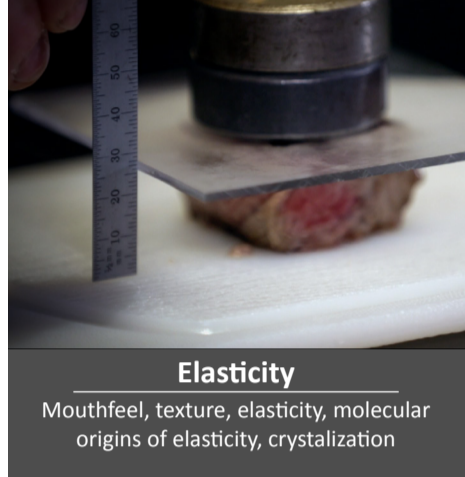
WEEK 2: ENERGY, TEMPERATURE AND HEAT



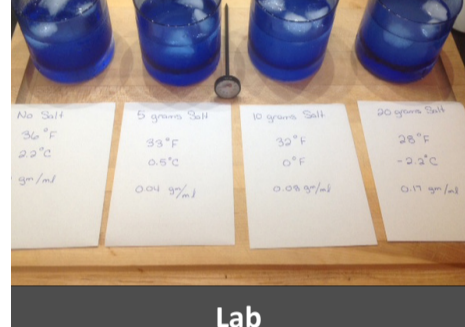
WEEK 3: PHASE TRANSITIONS



WEEK 4: ELASTICITY



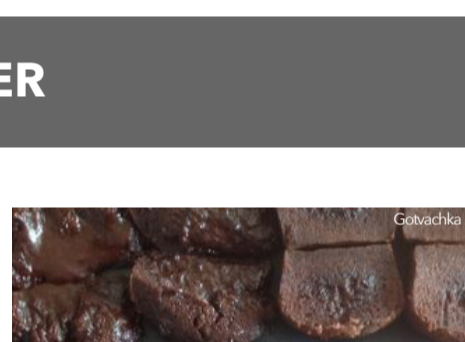
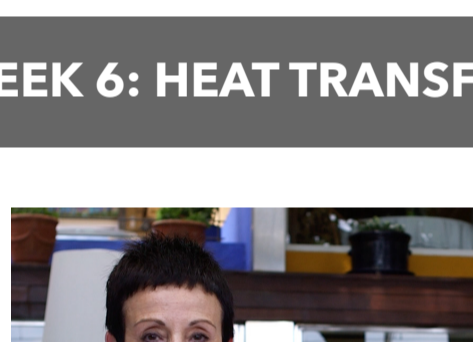
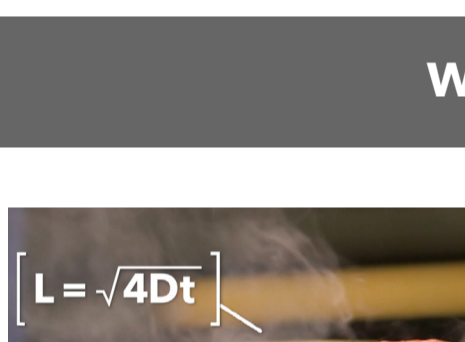
CANDY!



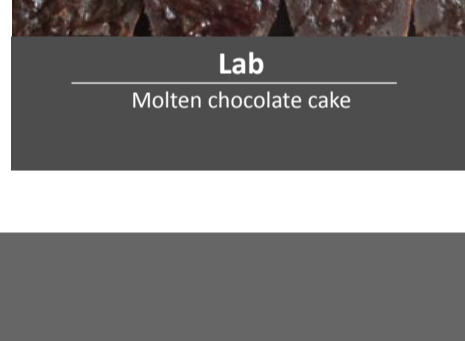
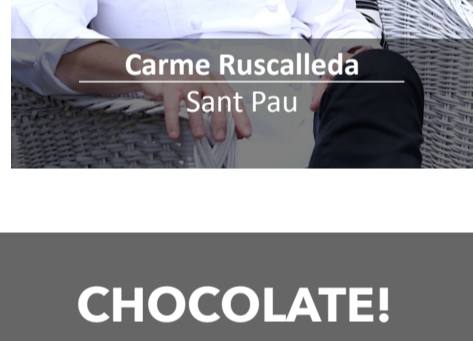
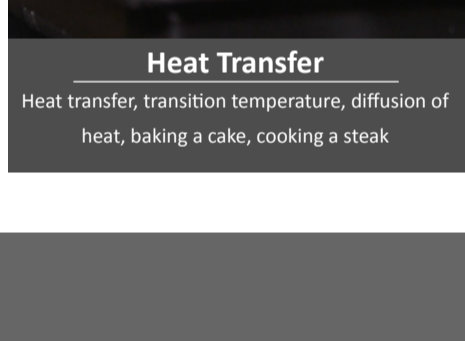
WEEK 5: DIFFUSION AND SPHERIFICATION



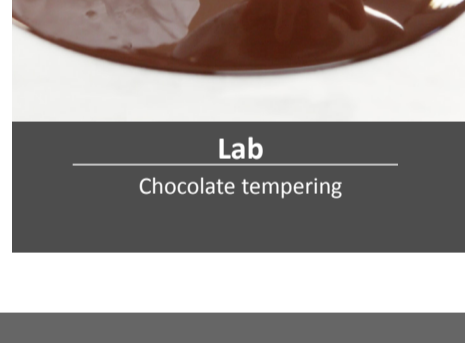
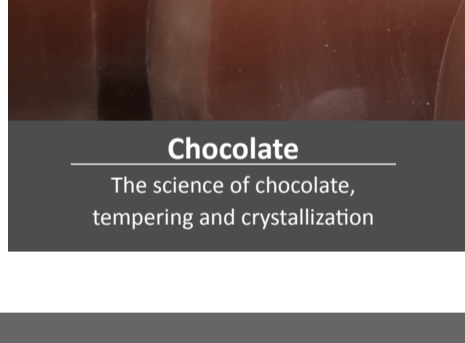
WEEK 6: HEAT TRANSFER



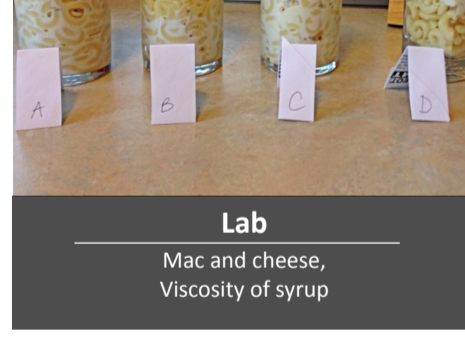
CHOCOLATE!



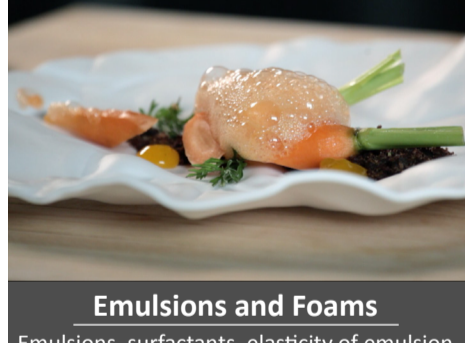
WEEK 7: VISCOSITY AND POLYMERS



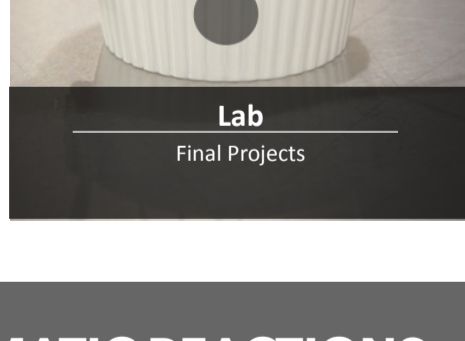
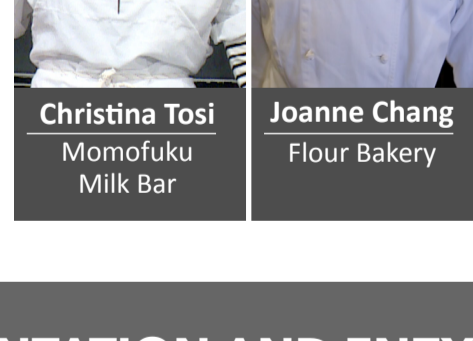
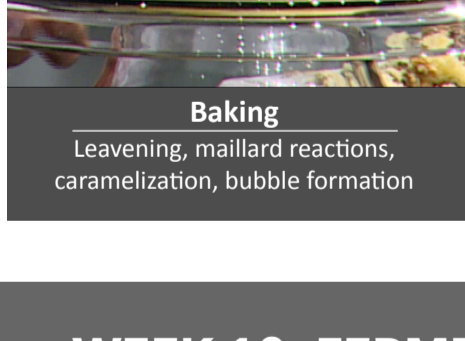
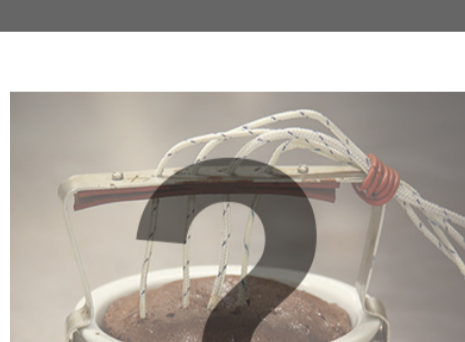
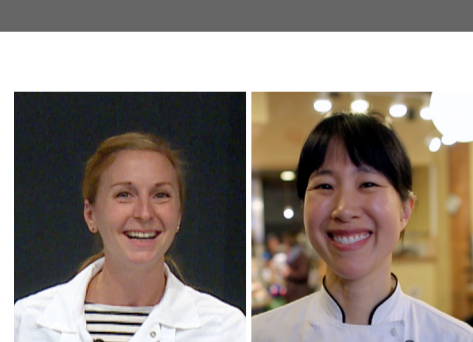
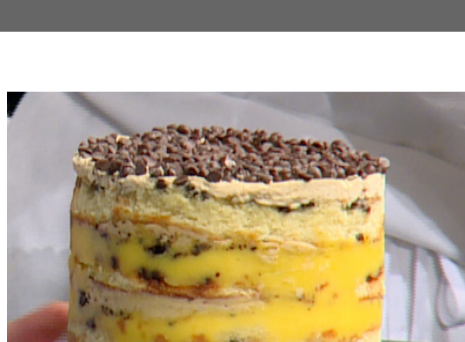
WEEK 8: EMULSIONS AND FOAMS



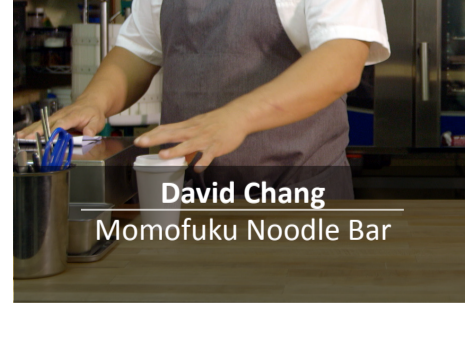
WEEK 9: BAKING



WEEK 10: FERMENTATION AND ENZYMATIC REACTIONS



SUSTAINABILITY AND HAUTE CUISINE



ADDITIONAL CONTRIBUTORS

