

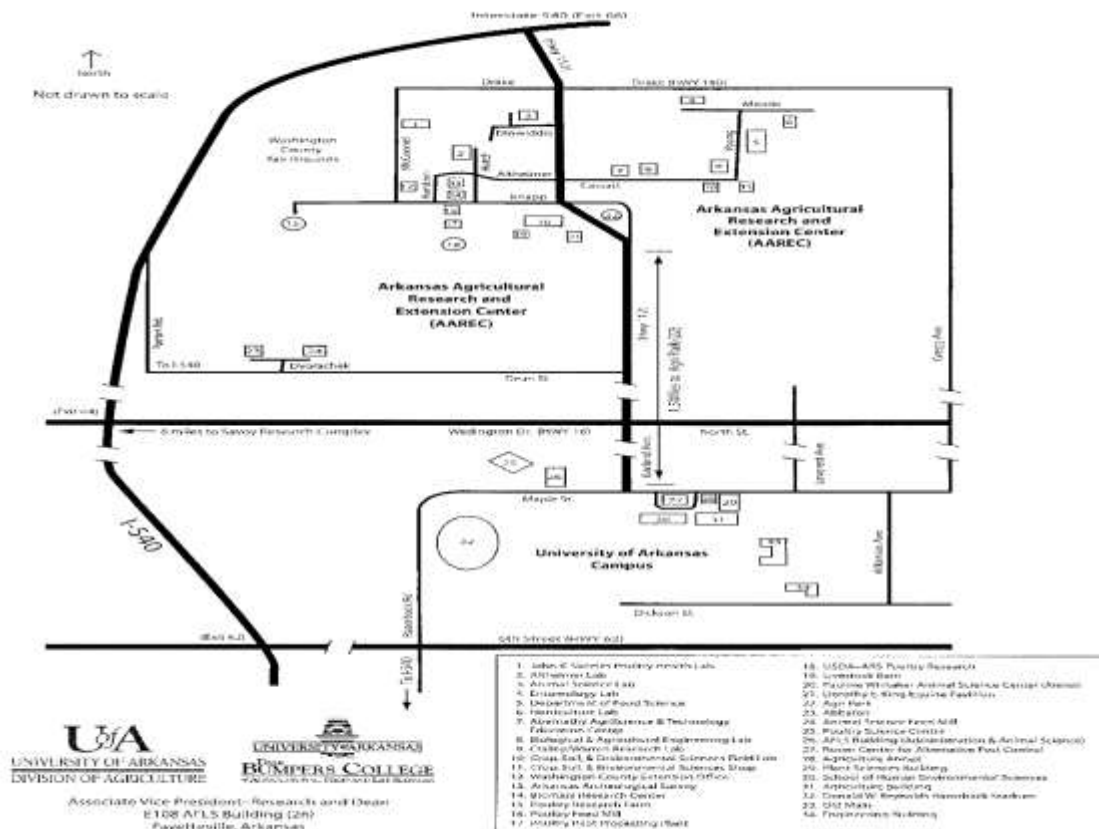
FDSC 1103- INTRODUCTION TO FOOD SCIENCE SYLLABUS

Spring 2017
MWF 10:45-11:35 am
AFLS 0107E

Instructor: Dr. Luke Howard
Office: FDSC N206
Phone: 575-2978
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Office hours:

T and Th 10-11 am in my office, or by appointment- I am available any time my door is open. Please call or e-mail beforehand to make sure I will be in the office.





 Associate Vice President—Research and Dean
 E108 AFLS Building (2n)
 Fayetteville, Arkansas

Description: This course will introduce the basics of food science and provide a branch point for discussions about common misconceptions about foods.

Course Outcomes: Students will be able to understand basic food science concepts and communicate effectively with others in the field.

Course Information:

Text and Materials:

Required Texts- *Introduction to Food Science, Spring 2017 Course Manual*, P.A. 0370 and *Food Bites: The Science of the Foods We Eat* (Hartel and Hartel, 2008, Springer Science + Business Media) are available in the bookstore. See the syllabus for reading assignments.

Suggested Text - *Essentials of Food Science-Second Edition* (Vaclavik and Christian, 2003, Kluwer Academic Publishers, New York, NY) is recommended for additional information. Limited copies are available in the library.

Academic Honesty:

“As a core part of its mission, the University of Arkansas provides students with the opportunity to further their educational goals through programs of study and research in an environment that promotes freedom of inquiry and academic responsibility. Accomplishing this mission is only possible when intellectual honesty and individual integrity prevail.”

“Each University of Arkansas student is required to be familiar with and abide by the University’s ‘Academic Integrity Policy’ which may be found at <http://provost.uark.edu/> Students with questions about how these policies apply to a particular course or assignment should immediately contact their instructor.”

Special Needs: If you need an accommodation due to a disability, please make arrangements to discuss this with your instructor during the first two weeks of the semester.

Inclement Weather: This class will follow the University policy for closing due to inclement weather.

Emergency Procedures

Many types of emergencies can occur on campus; instructions for specific emergencies such as severe weather, active shooter, or fire can be found at emergency.uark.edu.

Severe Weather (Tornado Warning):

- Follow the directions of the instructor or emergency personnel
- Seek shelter in the basement or interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building
- Stay in the center of the room, away from exterior walls, windows, and doors

Violence / Active Shooter (CADD):

- **CALL-** 9-1-1
- **AVOID-** If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
- **DENY-** Barricade the door with desk, chairs, bookcases or any items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police its safe.
- **DEFEND-** Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.

Grading Policy:

Pre-final grading policy

Participation	5 %
Exams (3)	85 %
Quizzes	10 %
Total	100 %

Final grading policy – the comprehensive final exam is **optional**, and can only improve your grade. If you are content 😊 with your pre-final grade you are exempt from taking the final.

Participation	5 %
Exams (3)	60 %
Final Exam	25 %
Quizzes	10 %
Total	100 %

Grades will be based as follows:

Percentile	Letter Grade
90-100%	A
80-89%	B
70-79%	C
60-69%	D
Below 60%	F

Participation- you will be assessed a grade based on attendance, preparedness for discussions, attentiveness, and class participation. An attendance sheet will be passed out each class period and you are expected to sign it even if you come in late. **Please do not attempt to sign in for other students that miss class.** Excused absences are reserved for official university functions, medical situations or deaths in the family (all require documentation). E-mail the instructor in advance if possible, or directly afterward regarding excused absences. Excessive absences will result in forfeiture of the participation grade. **Quizzes and exams missed due to unexcused absences cannot be made up. Quizzes and exams missed due to excused absences must be made up within one week after the absence. There are no extra credit assignments!**

Exams- Three one-hour exams will be given covering material discussed in class and reading assignments.

Final Exam- The final exam is cumulative and will be given on Monday May 8th from 10:15 am to 12:15 pm.

Quizzes- Periodic quizzes will be given to monitor information retention and progress.

Class Format:

The format for this class will vary from traditional lectures, group discussions, guest speakers, and video presentations.

Class Schedule

Please note: The order of organization of topics and/or exam schedule changes may occur during the semester. Any such changes will be announced in class, and the class announcements will be considered as actual notice. Students who missed the announcement for any reason must take responsibility to get the correct information before the changed events have occurred.

Week	Date	Topic	Reading
1	W, 1/18	Introduction	FB- Ch. 1, 2
	F, 1/20	Biotechnology -Video	
2	M, 1/23	Biotechnology	
	W, 1/25	Food Chemistry-Carbohydrates I Case Study: Chocolate Pudding Food	
	F, 1/27	Food Chemistry-Carbohydrates II Case Study: Chocolate Pudding Food	FB - Ch. 30
3	M, 1/30	Chemistry-Proteins Case Study: Gelatin	FB - Ch. 31
	W, 2/1	Food Chemistry-Lipids Case Study: Margarine and Trans Fat	FB - Ch. 16, 45
	F, 2/3	Food Nutrition I Case Study: Sugar Alcohols Food Nutrition II	FB – Ch. 28, 40
4	M, 2/6	Food Nutrition II	
	W, 2/8	Food Law	
	F, 2/10	Food Microbiology Case Study: Apple Cider	FB - Ch. 8, 11, 12, 29, 50, 51
5	M, 2/13	Exam Review-Who Wants to Ace the Test?	
	W, 2/15	EXAM I	
	F, 2/17	Food Processing-Video	
6	M, 2/20	Raw Material Handling Case Study: CA Storage of Apples	FB - Ch. 4, 42
	W, 2/22	Drying Case Study: Fruit Leathers	FB - Ch. 6, 18, 41
	F, 2/24	Heat Preservation I	

7	M, 2/27	Heat Preservation II	
	W, 3/1	Refrigeration and Freezing Case Study: Frozen Desserts	FB - Ch. 5, 19, 35, 36
	F, 3/3	Food Frying	
8	M, 3/6	Food Packaging Case Study: Intelligent Packages	FB - Ch. 24, 25, 26, 27
	W, 3/8	Milk and Dairy Products-Video	
	F, 3/10	Exam Review- Who Wants to Ace the Test?	
9	M, 3/13	EXAM II	
	W, 3/15	Milk and Dairy Products Case Study: Neapolitan Ice Cream	FB –Ch. 14, 15, 37
	F, 3/17	Off ☺☺	
10	3/20- 3/24	SPRING BREAK ☺	
11	M, 3/27	Red Meat Production and Processing	
	W, 3/29	Grain and Oilseeds Case Study: Peanut Butter	FB – Ch. 33
	F, 3/31	Fruit and Vegetable Products I Case Study: Guacamole	FB-Ch. 10
12	M, 4/3	Fruit and Vegetable Products II Case Study: Raisins	FB-Ch. 39
	W, 4/5	Beverages I Case Study: Fresh Orange Juice	FB Ch. 49
	F, 4/7	Beverages II Case Study: Skunky Beer	FB - Ch. 47, 48
13	M, 4/10	Sensory Testing	
	W, 4/12	Current Topics in Food Science	
	F, 4/14	Current Topics in Food Science	

14	M, 4/17	Confections I Case Study: Caramel	FB - Ch. 38, 54, 55, 56, 57
	W, 4/19	Exam Review- Who Wants to Ace the Test?	
	F, 4/21	EXAM III	
15	M, 4/24	Confections II Case Study: Chocolate Gone Bad	FB Ch. 17, 58, 59, 60
	W, 4/26	Irradiation	FB - Ch. 7
	F, 4/28	Organic Foods	
16	M, 5/1	Functional Foods	
	W, 5/3	Final Exam Review- Who Wants to Ace the Test?	
	F, 5/5	Dead Day	
17	M, 5/8	FINAL EXAM 10:15 am-12:15 pm	

FB- *Food Bites: The Science of the Foods We Eat*