

Food as Medicine 11:400:106
Fall 2020 Syllabus

Sept 1- Dec 7, 2020

3 credits

- This class is conducted via Asynchronous Remote instruction
- NO live lectures and NO online class meetings
- Two recorded lectures in brief will be posted for the week every Tuesday.
- I expect all students are expected to watch the video recording and go over the corresponding power point for the lectures.
- All of the materials that you will need for this course will be posted in the class Canvas website (<https://tlt.rutgers.edu/canvas>).

Instructor: Dr. Chitra Ponnusamy (“Dr. P”). E-mail: cp470@scarletmail.rutgers.edu

TA: Shuo Yuan. E-mail: sy362@sebs.rutgers.edu

**DO NOT SEND ANY E-MAIL MESSAGE VIA CANVAS.
IF YOU DO, DO NOT EXPECT ME TO REPLY**

Office Hours: I will be available online (via Canvas Conferences) Tue & Fri between 11:30-12:50 pm. No appointment is needed if you need to get in touch with me during these hours.

Besides office hours, we (TA and myself) try to answer any questions promptly via email; you can meet with me other times via Canvas conferences by appointment. For appointments: [Microsoft Bookings](#)

Note: Write to me and Shuo and include “Food as Med Fall 2020” in the subject line. Give your full name, RUID and your phone number. Our numbers will be blocked, so pick up.

Course Description:

The course starts with an introduction to nutrients, food microbial ecology and human microbiome, and their roles in health and disease processes and prevention. Recent studies on the various health claims of probiotic foods and supplements will be discussed. The course provides an understanding into the functional food components (e.g. antioxidants, phytochemicals, bioactive peptides) inherent in various foods and how they are being tapped and utilized for their health promoting benefits.

Objectives of the Course:

At the end of the course, students will be able to:

1. Define the key terms – Human Microbiome, Microbial Ecology, Probiotics, prebiotics, Synbiotics, Functional Foods and nutraceuticals- that are used to discuss the scientific relationship between food and health.
2. Identify the potential impact of functional foods/supplements and learn their mechanistic actions on health.
3. Understand and be able to assess how the functional food ingredients are being utilized by food processing industry.

SAS Core Curriculum Learning Goals

I: This course is core certified for Natural Sciences (NS)- e & f Goals.

Goal e. Understand and apply basic principles and concepts in the physical or biological sciences.

Goal f. Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis



What do you need for this course?

- Textbook: There is NO mandatory textbook required for this course.
- High speed internet, laptop with webcam and microphone. Make sure your computer system will support Proctortrack (<https://www.proctortrack.com/tech-requirements/>).
- Exams WILL be administered *via* Proctortrack for this course. Necessary files for Proctortrack will be posted in Canvas.

What do you need to do to complete this course?

Student expectations from this course

1. Follow the Syllabus, Class Schedule posted
2. Read Posted Announcements in Full
3. Watch the posted lecture videos each week and power point lectures for each class
4. Three Exams *via* Proctortrack and completion of 5-part assignment in Canvas
5. Do not use cell phone to read announcements and to complete coursework; Use computer or laptop.

Assignment:

- There is ONE mandatory assignment that all students MUST submit to receive their final grade. The assignment is divided into 5 parts (Part 1- 5); refer to the dates of submission in the class schedule posted below for maximum points.
- **After the submission period for each part closes, a late submission version of the part will open; any part can be submitted until the semester end for up to 50% of the points.**

Exams:

1. ONLY lecture PPTs - you need to study for exams.
2. In each lecture, the top set of slides (before "Additional Slides not included for exam") will contain the material that will be focused on in your exams. When studying for exams, pay extra attention to any text written in **bold** or in **different colors**. The material such as figures, numbers are NOT included for exams. Materials in videos will NOT be questioned in exams.
3. All 3 exams will be MCQs; 50 questions in each exam. Exams are NOT cumulative. Only ONE submission is allowed for each exam.
4. All 3 exams will be via proctor track (PT); whatever concerns you have, contact me via email or appointment link as posted in Syllabus.
5. Exams will be open for a 24-hour period; time limit of 1.5-3 hours will be given for completion. Be mindful that we will be available for support on the exam days from

9am-8pm (US EST) only. If you need help during the exams, email us from your phone along with your number for me to call you back. You will be flagged by PT for using your phone; I shall manually review your tests and discount that based on time(s) you completed the exams.

6. I shall be posting a Practice Quiz (0 points) via PT before exam 1; you can attempt this multiple times to get used to writing exams via PT.

FAILURE TO ATTEMPT ALL 3 EXAMS AND SUBMIT ASSIGNMENT WILL RESULT IN A "F" GRADE FOR THE COURSE.

By submitting all the above for grading, you are stating that it is your work alone. Academic integrity infractions are taken very seriously at the University.

If I believe that you have cheated it will be treated according to policy as stated at <http://academicintegrity.rutgers.edu/academic-integrity-disciplinary-process>

Grading:

3 Exams	25 points each	75 points	75%
Assignment (5 parts)	5 points each part	25 points	25%
Total		100 points	100%

Final Grades will be assigned on a straight scale:

≥90% = A; ≥85% = B+; ≥80% = B; ≥75% = C+; ≥70% = C; ≥60% = D.

Bonus Points: +2 points will be added to each students' final points if more than 80% of the class completes the anonymous SIRS at the end of the course.

Special Needs: Students with a disability: please contact me immediately so that we may make any necessary arrangements to support a successful learning experience.

INSTRUCTIONS FOR REMOTE INSTRUCTION CLASS

It is your responsibility to make sure of internet access.

There could be instances of power outage/ internet issues for you, myself and the TA.

DO NOT PANIC during those situations.

Contact us via email as soon as you can, and we shall do the same!!!!!!

I EXPECT ALL STUDENTS TO READ POSTED ANNOUNCEMENTS.

My only communication mode to all students will be via
ANNOUNCEMENTS in Canvas!!!!

**REMEMBER: USE LAPTOP OR COMPUTER TO READ ANNOUNCEMENTS AND
FOR ALL COURSE-WORK!!!!**

Cell phones are a tool for communication; cell phone is NOT a study aid.

FOLLOW THE SYLLABUS!!!!!! Check Announcements often

Keep a **SCHEDULED TIME** during the week for the course; just like you would do for a face-to-face class. *You procrastinate; you lose track and flow of the course.....*

If you lack discipline, you may FAIL the course.

Class Schedule (Sep 1- Dec 10, 2020)

Topic dates may change; you shall be notified in such situations. Exam dates are NOT likely to change.

Lec	Day/date	Topic*	Submissions
UNIT 1: INSIGHTS INTO THE HUMAN BODY			
1	Tue Sept 1	Introduction to class & syllabus overview	
2	Fri Sept 4	Nutrients in Foods	
Tue Sept 8: Rutgers follow Monday class schedule on Tue, Sept 8. I do not have office hours on Tue, Sept 8 from 11:30-12:50pm.			
3	Fri Sept 11	The Human Microbial Ecology	Assignment part 1 of 5 opens
4	Tue Sept 15	The Disease Processes- I	
5	Fri Sept 18	The Disease Processes- II	
6	Tue Sept 22	Pro- & Pre- biotics in Foods- I	
7	Fri Sept 25	Pro- & Pre- biotics in Foods- II	Assignment Part-1 of 5

8	Tue Sept 29	Pro- & Pre-biotics in Foods- II continued	Assignment part 2 of 5 opens
9	Fri Oct 2	EXAM -1; Exam will be open for 24-48 hours. One attempt only.	
10	Tue Oct 6	Nutraceuticals & Functional Foods	
UNIT 2: FUNCTIONAL PERSONALITY OF FOODS			
11	Fri Oct 9	Carbohydrates: Functional Structural components	
12	Tue Oct 13	Fats: Is the Butter Back?	Assignment Part-2 of 5
13	Fri Oct 16	How do you study microorganisms in human gut?	Assignment part 3 of 5 opens
14	Tue Oct 20	The Peptides & Proteins: The Builder Stuff	
15	Fri Oct 23	Microalgae and Fish: Up on a Pedestal	Assignment Part-3 of 5
16	Tue Oct 27	Soy, Nuts, Seeds, Mushroom: The Giants	Assignment part 4 of 5 opens
17	Fri Oct 30	Red Wine, Coffee & Chocolate: The Ultimate for Health	
18	Tue Nov 3	EXAM -2; Exam will be open for 24-48 hours. One attempt only.	
19	Fri Nov 6	Phytochemicals: Eat 'em up	
20	Tue Nov 10	Plant Extracts & Supplements- I	
21	Fri Nov 13	Plant Extracts & Supplements- II	
22	Tue Nov 17	Movie	Assignment Part-4 of 5

UNIT 3: PRODUCTION & PROCESSING TECHNOLOGIES OF FOODS			
23	Fri Nov 20	Processing Technologies- I	Assignment part 5 of 5 opens
24	Tue Nov 24	Processing Technologies- I	
25	Wed Nov 25	Processing Technologies- II	
26	Tue Dec 1	Processing Technologies- II Continued	Assignment Part-5 of 5
27	Fri Dec 4	Conventional Vs Organic Foods Vs Food Biotech	
28	Tue Dec 8	Slippage	
EXAM- 3		Exam- 3: Will be open from 12/15. You will be given 48-72 hours to finish the exam. One attempt only.	

Topics may change based on pace of class; you will be duly notified.

Rutgers Academic Integrity

- <http://academicintegrity.rutgers.edu/academic-integrity-policy/>
- https://slwordpress.rutgers.edu/academicintegrity/wp-content/uploads/sites/41/2014/11/AI_Policy_2013.pdf

STUDENT WELLNESS SERVICES

Just In Case Web App <http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/
The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932- 1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation:

<https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Scarlet Listeners

(732) 247-5555 / <http://www.scarletlisteners.com/>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.