# Advanced Nutrition Micronutrients: Readings (11:709:403) Spring 2023

**Teaching Assistant**: Matthew Selby (Contact email: mls450@connect.rutgers.edu)

**Section 01**: Monday 2:00-3:20 PM in Hickman 205

**Section 02**: Monday 3:50-5:10 PM in Hickman 201

The first class will be on Monday, January 23rd, 2023

**Office hours**: By appointment. If you would like to arrange a meeting outside of regular class time or office hours, you can email Matt, but his availability varies, and meeting times are at his discretion. The further in advance you can schedule a meeting, the more likely Matt can meet.

**Contact:** Contact Matt by email at <a href="mls450@connect.rutgers.edu">mls450@connect.rutgers.edu</a>. For prompt responses, include 11:709:403 or 11:709:401 at the end of the subject line; this will transfer you email to a special inbox Matt set up for the class and he will see your message much faster.

All students must also be registered for the lecture portion of this course, Advanced Nutrition Micronutrients (11:709:401). This course is intended for <u>undergraduates</u>.

(When applicable) In order to protect the health and well-being of all members of the University community, masks must be worn by all persons on campus when in the presence of others (within six feet) and in buildings in non-private enclosed settings (e.g. common workspaces, workstations, meeting rooms, classrooms, etc.). Masks must be worn during in person any class meetings, examinations, office hours; any student not wearing a mask will be asked to leave.

# **Objective**

The purpose of this course is to utilize a small classroom environment to discuss the material covered in Advanced Nutrition lectures each week. Class discussions will center on review problems and study questions based on material from the *previous* week's lectures (i.e., we will not cover material covered in Monday's lecture on the same day). This course is intended for students who feel their background and understanding of biochemistry limits their achievement in the main course. Due to differing scientific backgrounds, not everyone will have the same blind spots, and as such it is critical to ask questions and tell Matt which topics need extra attention. To maximize the benefits of this course, students are expected to come to each class meeting prepared to ask questions and participate in topic reviews.

# **Attendance & Participation**

Attendance and participation are **mandatory** during class. Attendance will be taken at the beginning of class each day, and to earn a full 5 points for the day students are expected to be engaged and attentive. The TA will maintain a separate attendance log, not on Canvas. The cumulative participation and attendance grade will be updated twice a term; the first time will be at the midway point in the course, on March 6<sup>th</sup>, and the second time will be at the end of the term.

Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website <a href="https://sims.rutgers.edu/ssra/">https://sims.rutgers.edu/ssra/</a> to indicate the date and reason for your absence. An email is automatically sent to Matt informing him of the absence. If an

emergency arises, you can also contact Matt directly (see the Contact section above for the appropriate way to do so).

## **Course Material**

All materials will be accessible on the Canvas sites (11:709:403:01&02 RDGS ENERGY MICRO). Class discussions will draw heavily from the professors' learning goals included with each lecture, so students should focus on those points while studying and preparing for discussion.

#### Homework

Written work: Homework will be posted every Thursday on Canvas and covers the material from the previous week's Monday and Friday lectures. Completed homework should be submitted on Canvas by Monday 12:00 PM. Questions that are bolded will be graded as part of the homework assignment. Each homework will account for 5 points. Answer keys will be posted after the homework due date, so any homework turned in late will not be graded and will receive a 0. The homework will cover basic definitions and fundamental concepts, and we will put these definitions and concepts together in the discussion class. Class discussions will be *student-led*, with the instructor asking questions and students working together to explain the answers. As such, coming to class prepared is important, but do not be afraid to ask for help!

Artistic work: Turning words on a page into an illustration is one of the best ways to learn material, so part of your weekly assignment is to draw a diagram illustrating a concept from lecture. It can be any concept you want, but preferably a concept you struggle with and need extra time thinking over. You can use any medium you prefer (PowerPoint, hand-drawn, tablet illustration, etc.), simply upload your masterpiece to Canvas for **3 points** once it is completed. Art will be due the same time as your written homework, by Monday 12:00 PM.

## **Ouizzes**

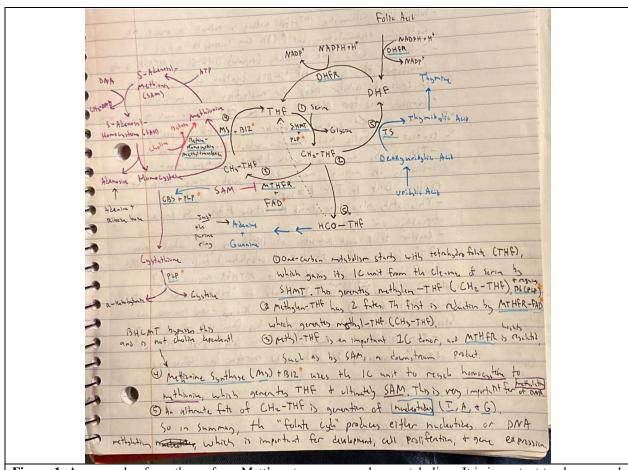
There will be 7 short "take home" online quizzes throughout the term, each worth 5 points. You will have 20 minutes to complete it once started and get 1 attempt. The quizzes are meant to prepare you for the tests, so treat them like a test; no notes, phones away, and focus!

Quiz #	Quiz Open Date	Topics Covered
1	Friday, Feb. 3 <sup>rd</sup>	DRIs, Water balance, Electrolytes, Nutrient Regulation of Gene Expression
2	Friday, Feb. 10 <sup>th</sup>	Iron, Zinc, Copper, Manganese, Iodine
3	Friday, Mar. 3 <sup>rd</sup>	Selenium, Calcium, Phosphorous, Magnesium, Fluoride, Vitamins K and D
4	Friday, Mar. 24 <sup>th</sup>	Carotenoids, Antioxidant Vitamins E and C
5	Friday, Apr. 7 <sup>th</sup>	B Vitamins, Nutrigenetics, Nutrigenomics
6	Friday, Apr. 21st	Metabolism, Body Composition
7	Friday, Apr. 28 <sup>th</sup>	Energy Balance

# **Grading (% of total grade)**

Participation/Attendance ~32% Quizzes ~16% Homework ~52%

	Points Each	Total Points	Grading:
Participation + Attendance (14 classes)	5	70	A: 195-217 B+: 184-194 B: 173-183 C+: 163-172 C: 152-162
Take-home quizzes (7)	5	5 35	
Homework and Drawing Assignment (14)	8	112	
Total (Final grades will be rounded up, within reas	217	D: 130-151 F: 0-129	



**Figure 1**. An example of a pathway from Matt's notes on one carbon metabolism. It is important to always read figure captions; for example, by reading this caption, you know that if you email "Wow, you should have gone to art school!" to Matt, you can get 5 extra credit points in 11:709:403 (not transferrable to the lecture class). Don't forget to include the course code in the subject line!

#### ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Please follow the procedures outlined at <a href="https://ods.rutgers.edu/students/registration-form">https://ods.rutgers.edu/students/registration-form</a>. Full policies and procedures are at <a href="https://ods.rutgers.edu/">https://ods.rutgers.edu/</a>

#### ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at http://academicintegrity.rutgers.edu/academic-integrity-policy. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others
- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

## STUDENT WELLNESS SERVICES

# Just In Case Web App <a href="http://codu.co/cee05e">http://codu.co/cee05e</a>

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 / <a href="https://ods.rutgers.edu/">https://ods.rutgers.edu/</a>

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 / https://rutgers.campuslabs.com/engage/organization/scarletlisteners

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