

# University of Manitoba Faculty of Agricultural and Food Sciences Department of Food and Human Nutritional Sciences

FOOD 4230: Food Research (3 CH)

# **Course Syllabus – Winter 2021**

## **COURSE DETAILS**

**Course Title & Number:** Food Research (FOOD 4230)

Number of Credit Hours: 3 CH

Class Times & Days of Week: Not timetabled – Independent research required

**Location for** Not assigned

classes/labs/tutorials:

**Pre-Requisites:** Permission of Course Instructor

**Voluntary Withdrawal Date:** March 21, 2021

## INSTRUCTOR CONTACT INFORMATION

Instructor(s) Name: Dr. Rotimi Aluko

Office Location: 106 Richardson Centre or W567 Duff Roblin Building

Office Hours or Availability: Not assigned – Please make appointment via email

**Office Phone No.** 204-474-8883

Email: rotimi.aluko@umanitoba.ca

## COURSE DESCRIPTION

Research interests and aptitudes of students are developed through specific project assignments related to the food industry.

## **GENERAL COURSE INFORMATION**

FOOD 4230 is an independent study course. While Dr. House is the course coordinator, each student will be assigned a direct academic supervisor. The academic supervisor will direct the specific, day-to-day activities undertaken by the student, including the finalization of the specific research topic.

# **COURSE GOALS**

To expose the student to the process of conducting a research project by allowing them to carry out a research project on a topic of interest under the supervision of an academic staff member.

## **LEARNING OUTCOMES**

Upon completion of this course, students should be able to:

- Retrieve and evaluate the literature appropriate to the research topic
- Design a research experiment on an appropriate topic
- Demonstrate efficient and effective laboratory work habits
- Manage time efficiently
- Evaluate data using appropriate statistical techniques
- Interpret research data relevant to the problem being researched
- Write a report on the research experiment that effectively conveys what was done, why it was done, what results were obtained and what those results mean.
- Present the research data orally in a clear and concise fashion
- Defend the methodologies used, the way the data was interpreted and the conclusions reached in doing this research project.

# **TEXTBOOK, READINGS, MATERIALS**

There are no required texts or readings for this course. Specific reading material will be assigned to you by your direct research supervisor.

# **COURSE TECHNOLOGY**

It is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical and legal manner. The student can use all technology in classroom setting only for educational purposes approved by instructor and/or the University of Manitoba Disability Services. For this course, you will need to make use of existing literature search programs (PubMed; SCOPUS) for your research needs. Additional information on these programs can be obtained at the Agriculture Library.

## POLICY ON CLASS COMMUNICATION

The University requires all students to activate an official University email account. For full details of the Electronic Communication with Students please visit: <a href="http://umanitoba.ca/admin/governance/media/Electronic Communication with Students Policy - 2014 06 05.pdf">http://umanitoba.ca/admin/governance/media/Electronic Communication with Students Policy - 2014 06 05.pdf</a>

Please note that all communication between me and you as a student must comply with the electronic communication with student policy

(<a href="http://umanitoba.ca/admin/governance/governing">http://umanitoba.ca/admin/governance/governing</a> documents/community/electronic communication with students policy.html). You are required to obtain and use your U of M email account for all communication between yourself and the university.

#### RECORDING CLASS LECTURES

*J. House* and the University of Manitoba hold copyright over the course materials, presentations and lectures which form part of this course. No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without permission of J. House's (both paper and digital) are for the participant's private study and research.

# **USING COPYRIGHTED MATERIAL**

Please respect copyright. We will use copyrighted content in this course. I have ensured that the content I use is appropriately acknowledged and is copied in accordance with copyright laws and University guidelines. Copyrighted works, including those created by me, are made available for private study and research and must not be distributed in any format without permission. Do not upload copyrighted works to a learning management system (such as UM Learn), or any website, unless an exception to the *Copyright Act* applies or written permission has been confirmed. For more information, see the University's Copyright Office website at <a href="http://umanitoba.ca/copyright/">http://umanitoba.ca/copyright/</a> or contact <a href="mailto um copyright@umanitoba.ca">um copyright@umanitoba.ca</a>.

## PLAGIARISM AND CHEATING

Plagiarism or any other form of cheating in examinations, term tests or academic work is subject to serious academic penalty (e.g. suspension or expulsion from the faculty or university). Cheating in examinations or tests may take the form of copying from another student or bringing unauthorized materials into the exam room (e.g., crib notes, pagers or cell phones). Exam cheating can also include exam personation. (Please see <a href="Exam Personation">Exam Personation</a>, found in the Examination Regulations section of the General Academic Regulations). A student found guilty of contributing to cheating in examinations or term assignments is also subject to serious academic penalty.

To plagiarize is to take ideas or words of another person and pass them off as one's own. In

short, it is stealing something intangible rather than an object. Plagiarism applies to any written work, in traditional or electronic format, as well as orally or verbally presented work. Obviously it is not necessary to state the source of well-known or easily verifiable facts, but students are expected to appropriately acknowledge the sources of ideas and expressions they use in their written work, whether quoted directly or paraphrased. This applies to diagrams, statistical tables and the like, as well as to written material, and materials or information from Internet sources. To provide adequate and correct documentation is not only an indication of academic honesty but is also a courtesy which enables the reader to consult these sources with ease. Failure to provide appropriate citations constitutes plagiarism. It will also be considered plagiarism and/or cheating if a student submits a term paper written in whole or in part by someone other than him/ herself, or copies the answer or answers of another student in any test, examination, or take-home assignment.

Working with other students on assignments, laboratory work, take-home tests, or on-line tests, when this is not permitted by the instructor, can constitute Inappropriate Collaboration and may be subject to penalty under the Student Discipline By-Law.

An assignment which is prepared and submitted for one course should not be used for a different course. This is called "duplicate submission" and represents a form of cheating because course requirements are expected to be fulfilled through original work for each course.

When in doubt about any practice, ask your professor or instructor.

The Student Advocacy Office, 519 University Centre, 474-7423, is a resource available to students dealing with Academic Integrity matters.

## STUDENTS ACCESSIBILITY SERVICES

If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and exam accommodations. Students who have, or think they may have, a disability (e.g. mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation.

Student Accessibility Services <a href="http://umanitoba.ca/student/saa/accessibility/">http://umanitoba.ca/student/saa/accessibility/</a>
520 University Centre
204 474 7423

Student accessibility@umanitoba.ca

## OTHER STUDENT SERVICES

#### **Writing and Learning Support:**

The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study

strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at: <a href="http://umanitoba.ca/student/academiclearning/">http://umanitoba.ca/student/academiclearning/</a>

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

# **University of Manitoba Libraries (UML):**

As the primary contact for all research needs, your liaison librarian can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone, and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: <a href="http://bit.ly/WcEbA1">http://bit.ly/WcEbA1</a> or name: <a href="http://bit.ly/1tJ0bB4">http://bit.ly/WcEbA1</a> or name: <a href="http://bit.ly/1tJ0bB4">http://bit.ly/McEbA1</a> or name: <a href="http://bit.ly/1tJ0bB4">http://bit.ly/McEbA1</a> or name: <a href="http://bit.ly/1tJ0bB4">http://bit.ly/McEbA1</a> or name: <a href="http://bit.ly/1tJ0bB4">http://bit.ly/McEbA1</a> or name: <a href="http://bit.ly/1tJ0bB4">http://bit.ly/1tJ0bB4</a>. In addition, general library and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: <a href="http://bit.ly/1sXe6RA">http://bit.ly/1sXe6RA</a>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the Libraries' homepage:<a href="http://www.umanitoba.ca/libraries">http://bit.ly/1sXe6RA</a>. When working remotely, students can also receive

#### **Student Counselling Centre (SCC):**

Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. *Student Counselling Centre:* <a href="http://umanitoba.ca/student/counselling/index.html">http://umanitoba.ca/student/counselling/index.html</a>

474 University Centre or S207 Medical Services (204) 474-8592

#### **Student Support Case Management:**

Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team.

Student Support Intake Assistant <a href="http://umanitoba.ca/student/case-manager/index.html">http://umanitoba.ca/student/case-manager/index.html</a>
520 University Centre

(204) 474-7423

For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.

#### **University Health Service:**

Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation.

University Health Service http://umanitoba.ca/student/health/

104 University Centre, Fort Garry Campus

(204) 474-8411 (Business hours or after hours/urgent calls)

# **Health and Wellness:**

Contact our Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault.

Health and Wellness Educator <a href="http://umanitoba.ca/student/health-wellness/welcome.html">http://umanitoba.ca/student/health-wellness/welcome.html</a> <a href="mailto-katie.Kutryk@umanitoba.ca">Katie.Kutryk@umanitoba.ca</a>

469 University Centre (204) 295-9032

#### Live Well @ UofM:

For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site:

http://umanitoba.ca/student/livewell/index.html

#### **Your Rights and Responsibilities:**

As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school. The <u>Academic Calendar http://umanitoba.ca/student/records/academiccalendar.html</u> is one important source of information. View the sections *University Policies and Procedures* and *General Academic Regulations*.

While all of the information contained in these two sections is important, the following information is highlighted.

- If you have questions about your grades, talk to your instructor. There is a process for term work and final grade appeals. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form <a href="http://umanitoba.ca/registrar/">http://umanitoba.ca/registrar/</a>
- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the Academic Integrity regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support <a href="http://umanitoba.ca/academicintegrity/">http://umanitoba.ca/academicintegrity/</a> View the Student Academic Misconduct procedure for more information.
- The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected conduct yourself in an appropriate respectful manner. Policies governing behavior include:

#### **Respectful Work and Learning Environment**

http://umanitoba.ca/admin/governance/governing\_documents/community/230.html

### **Student Discipline**

http://umanitoba.ca/admin/governance/governing documents/students/student discipli ne.html and,

## **Violent or Threatening Behaviour**

http://umanitoba.ca/admin/governance/governing documents/community/669.html

- If you experience Sexual Assault or know a member of the University community who
  has, it is important to know there is a policy that provides information about the supports
  available to those who disclose and outlines a process for reporting. The Sexual Assault
  policy may be found at:
  - http://umanitoba.ca/admin/governance/governing documents/community/230.html More information and resources can be found by reviewing the Sexual Assault site http://umanitoba.ca/student/sexual-assault/
- For information about rights and responsibilities regarding Intellectual Property view the policy <a href="http://umanitoba.ca/admin/governance/media/Intellectual Property Policy - 2013">http://umanitoba.ca/admin/governance/media/Intellectual Property Policy - 2013</a> 10 01.pdf

For information on regulations that are specific to your academic program, read the section in the Academic Calendar and on the respective faculty/college/school web site <a href="http://umanitoba.ca/faculties/">http://umanitoba.ca/faculties/</a>

Contact an **Academic Advisor** within our faculty/college or school for questions about your academic program and regulations <a href="http://umanitoba.ca/academic-advisors/">http://umanitoba.ca/academic-advisors/</a>

#### **Student Advocacy:**

Contact Student Advocacy if you want to know more about your rights and responsibilities as a student, have questions about policies and procedures, and/or want support in dealing with academic or discipline concerns.

http://umanitoba.ca/student/advocacy/

520 University Centre

204 474 7423

student advocacy@umanitoba.ca

# **Expectations: I Expect You To**

I will be available to you via email and in-person correspondence. I will treat you with respect and would appreciate the same courtesy in return. See <u>Respectful Work and Learning Environment Policy.</u>

# **Expectations: You Can Expect Me To**

I will respond to your enquiries with 24 hours. I will work with you to establish a program of research with your direct academic supervisor. I will return assignments in a timely fashion.

# **Course Evaluation Methods**

The marks for this course will be based on a combination of written and oral assignments, designed to guide you through the research process.

Due Date:	Assessment Tool	Value of
		Final Grade
Feb. 26, 2021 – 4:30 pm	Proposal	20%
Apr. 09, 2021	Completion of data collection	
Apr. 23, 2021 – 4:30 pm	Final report	50%
Apr. 19-23, 2021 - TBD	Oral presentation	20%
Apr. 21, 2021	Supervisor evaluation	10%

# **Grading**

<b>Letter Grade</b>	Percentage out of 100	Grade Point Range	Final Grade Point
A+	90-100	4.25-4.5	4.5
Α	80-89	3.75-4.24	4.0
B+	76-79	3.25-3.74	3.5
В	70-75	2.75-3.24	3.0
C+	65-69	2.25-2.74	2.5
С	60-64	2.0-2.24	2.0
D	50-59	Less than 2.0	1.0
F	Less than 50		0

# **Referencing Style**

Assignments should use the APA reference style as outlined in the text: American Psychological Association. (2009). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author.

# **Assignment Descriptions**

# Outline of contents for proposal, report and oral presentation

**Proposal:** The proposal is intended to be the organizational or thinking stage of the project. A well-prepared proposal makes both the research and writing of the final report proceed much more smoothly. The following should be included in the research proposal. All sections should be written in paragraph form (no point form).

- a. Tentative title
- b. Background overview 1 to 2 pages to serve as an introduction to the topic and indicate why you are interested.

c. Literature review - 1 to 2 pages to clarify current knowledge and technical situation

d. Research objectives - 1 or 2 clear statements

e. Research plan - 1 to 2 pages including experimental design if appropriate

f. Pertinent references - 6 to 12 main references - not a comprehensive list.

**Report:** The report is a comprehensive summation and discussion of your results (like a mini thesis). It should be between 25 and 40 pages in length and should include the following:

- a. Abstract between 100 and 150 words
- b. Table of Contents
- c. List of Figures
- d. List of Tables
- e. List of Abbreviations (if appropriate)
- f. Introduction 2 to 3 pages summarizing background and interest and restating objectives.
- g. Literature Review pertinent literature (no more than 10 pages)
- h. Materials and Methods include source of material, sufficient detail for experimental techniques to allow someone to reproduce your results and description of statistical techniques used.
- i. Results and Discussion (may be two separate sections)

include data in Table or Figure format (not both for the same data)

- include statistical comparisons where appropriate
- include some interpretation of the data and discussion of the significance of the results
- j. Conclusions and Recommendations (2 to 3 pages).
- k. Appendices (optional) you may want to include raw data, standard curves or basic statistics (e.g. ANOVA table)

**Presentation:** You will be required to give a 20-25 minute presentation of your research project. This presentation should include some background, a statement of objectives, some information on methods used (not a lot of detail), highlights of your results and conclusions. This will be followed by a question and answer period where you will defend methodologies used, interpretation of your data and the conclusions you derived from these data.

**Supervisor Evaluation:** The evaluation by the supervisor will be based on your meeting of deadlines, performance in the laboratory, contribution of original ideas, enthusiasm and attitude. This evaluation should not deter you from asking questions of the supervisor or instructor. This is a course and we are there to help you learn as much as possible about research.

# **Assignment Grading Times**

Grades will be returned in a timely manner and no later than 7 days post submission.

# **Assignment Extension and Late Submission Policy**

Assignment extensions will only be granted for medical reasons unless prior, advanced arrangements have been discussed. Assignments received after the due date will be subject to a 5% per day penalty.