

THE UNIVERSITY OF WESTERN ONTARIO
BRESCIA UNIVERSITY COLLEGE
SCHOOL OF FOOD AND NUTRITIONAL SCIENCES

Foods & Nutrition 3310B
Food Product Development

Class Information: Lecture 530 – Thursdays 2:30pm – 4:30pm Ursuline Hall 30
Lab Section 531 - Wednesdays 12:30pm - 2:30pm Foods Lab 1
Lab Section 532 - Mondays 7:00pm – 9:00pm Foods Lab 1

Prerequisites: Foods and Nutrition 2232. Registration in the Foods and Nutrition or Management and Organizational Studies modules (Honors Specialization, Specialization, Major).

Course Instructor: Lisa Doerr RD, MScFN
Office: Ursuline Hall 209
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Office Hours: Thursdays 4:30pm - 5:30pm, or by appointment

COURSE

DESCRIPTION: Examines the food product development process from concept to market. Discusses challenges, importance to the food industry, methods and techniques as well as new advancements and developments. Students will complete a product development project.

LEARNING

OBJECTIVES: Upon successful completion of this course, students will be able to demonstrate the Brescia Competencies of communication, critical thinking, inquiry and analysis, problem solving, self-awareness and development by:

- 1) Recognizing and appreciating the product development process from ideation to concept to prototypes to market
- 2) Applying this information to the development of a new food product in labs
- 3) Demonstrating acquired knowledge of food product development through written case studies and final exam
- 4) Researching, designing and developing a new food product based on a consumer need within a group of 2 – 4 students
- 5) Demonstrating ability to function in an effective project team

- 6) Presenting group project through a presentation and product sampling

BRESCIA

COMPETENCIES: Communication

The ability to exchange information and meaning across cultures, space and time through appropriate modes of communication. Includes oral, written, and interpersonal or group communication, as well as the ability to use current or innovative media.

Critical Thinking

The ability to engage in thinking characterized by the rational, informed, independent, and open-minded exploration of issues, ideas, and events before accepting or formulating a conclusion.

Inquiry and Analysis

The ability to reach informed decisions by breaking down complex issues, exploring evidence, and describing relationships among persons, things, or events.

Problem Solving

The ability to create and execute a strategy to answer a question or achieve a goal. Includes being able to anticipate the consequence of a potential solution, select a strategy among several alternatives, and decide when an acceptable outcome has been reached.

Self-Awareness and Development

The ability to draw meaning, knowledge and value from honest and fair reflection and self-evaluation. Students are able to recognize their values and their impact on others, and make a commitment to personal growth.

STRESS:

Emphasis will be placed on the food product development process from concept to market. Importance to the food industry, challenges, methods and new advancements will also be discussed. Nutritional impact of food processing will also be discussed.

APPROACH:

Lectures, discussions, guest speakers, assigned readings, lab and class assignments will be used to acquire knowledge and understanding in the area of food product development.

TEXT (required): Creating New Foods. The Product Developer's Guide. The Web Edition. 2009. Earle, MD and Earle, RL. The New Zealand Institute of Food Science and Technology. (available online)

Additional readings will be assigned from current literature on food product development.

TEXT (optional): Available in Beryl Ivey Library:

- New Product Development from Concept to Marketplace. 2011. G. W Fuller.
- Sensory and Consumer Research in Food Product Design and Development. 2012. H.R. Moskowitz, J.H. Beckley and A.V.A. Resurreccion
- Case Studies in Food Product Development. 2008. M.Earle and R. Earle.
- An Integrated Approach to New Food Product Development. 2009. H.R. Moskowitz, I.S. Saguy and T. Straus
- Food Product Development Based on Experience. 2002. C. Side (editor).
- Technology of Food Product Development. 1994. S.A. Matz.

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| MARKING: | Case Studies (due in class) | 30% |
| | Project Proposal (due February 8) | 10% |
| | Product Completion, Team Performance, Presentation and Product Sampling (due April 5) | 25% |
| | Final Exam (date TBA) | 35% |
| | Total | 100% |

**GENERAL
ADVICE:**

Lab Apparel:

White uniform or lab coat
Clean, rubber soled lab shoes (closed toe and heel)
Hair net

Lab Fees: \$45.00 per student

(Laboratory fees are billed along with your tuition. Payment must be made by the end of the third week of classes to continue in the course.)

Specific Course Policies:

- 1) For mark components of 10% or higher, any student who misses these requirements can request for accommodation from the academic counsellors on medical or non-medical grounds with proper documentation submitted. The academic counsellors will then make the request for accommodation to the faculty as necessary.
- 2) Failure to attend at least 75% of laboratories or studios will result in failure in the laboratory or studio and an "incomplete" in the course. Successful completion of the laboratory/studio will be necessary in order to receive credit in the course.
- 3) Assignments are due at time and date noted. **The mark will be reduced by 20%** on assignments submitted late. Assignments submitted after seven days will **not** be accepted for marking, except with documentation to show a confirmed personal illness or a death in her/his immediate family.
- 4) There will be no make-up mid-term test for a student who has missed a test except with documentation to show a confirmed personal illness or a death in her/his immediate family.

SCHEDULE OF TOPICS:

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| Jan 11 - Feb 15 | Introduction, product development process, food trends, ideation and brainstorming, team work, project management, prototype development and product evaluation |
| Feb 22 | Reading Week – No Lecture |
| Mar 1 – Apr 5 | Product optimization, why products fail, food packaging development, food labelling, quality control and assurance, food laws and regulations. |
| TBD | Product Showcase |

LABS MAY INCLUDE:

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| Jan 8 | First Week – No Labs |
| Jan 15 – Feb 14 | Market product evaluations/comparison, consumer needs assessment, ideation, concept generation, market evaluation, concept selection, prototype preparations and evaluations, and financial analysis |
| Feb 19/ 21 | Reading Week – No Labs |
| Feb 26 – Apr 4 | Packaging considerations, nutritional analysis and labelling considerations, and presentation preparation |

2017-18 BRESCIA UNIVERSITY COLLEGE ACADEMIC POLICIES AND REGULATIONS

1. POLICY REGARDING MAKEUP EXAMS AND EXTENSIONS OF DEADLINES

When a student requests academic accommodation (e.g., extension of a deadline, a makeup exam) for work representing 10% or more of the student's overall grade in the course, it is the responsibility of the student to provide acceptable documentation to support a medical or compassionate claim. All such requests for academic accommodation **must** be made through an Academic Advisor and include supporting documentation. Academic accommodation for illness will be granted only if the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete her academic responsibilities. Minor ailments typically treated by over-the-counter medications will not normally be accommodated. Documentation shall be submitted as soon as possible to the student's Academic Advisor indicating the period of illness and when the student should be able to resume academic responsibilities. Students must submit their documentation along with a request for relief specifying the nature of the accommodation being requested no later than two business days after the date specified for resuming responsibilities. Appropriate academic accommodation will be determined by the Dean's Office in consultation with the student's instructor(s). Please note that personal commitments (e.g., vacation flight bookings, work schedule) which conflict with a scheduled test, exam or course requirement are **not** grounds for academic accommodation.

A UWO Student Medical Certificate (SMC) is **required** if a student is seeking academic accommodation on medical grounds. This documentation should be obtained at the time of the initial consultation with the physician/nurse practitioner or walk-in clinic. A SMC can be downloaded from: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf. The student must request documentation sufficient to demonstrate that her ability to meet academic responsibilities was seriously affected. Please note that under University Senate regulations documentation stating simply that the student "was seen for a medical reason" or "was ill" is **not** adequate to support a request for academic accommodation.

Whenever possible, requests for academic accommodation should be initiated in advance of due dates, examination dates, etc. Students must follow up with their professors and Academic Advisor in a timely manner.

The full policy on requesting accommodation due to illness can be viewed at: <http://westerncalendar.uwo.ca/2017/pg117.html>

2. ACADEMIC CONCERNS

If you feel that you have a medical or personal problem that is interfering with your work, contact your instructor and Academic Advisor as soon as possible. Problems may then be documented and possible arrangements to assist you can be discussed at the time of occurrence rather than on a retroactive basis. Retroactive requests for academic accommodation on medical or compassionate grounds may not be considered.

If you think that you are too far behind to catch up or that your work load is not manageable, you should consult an Academic Advisor. If you consider reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines (refer to the Registrar's website, <http://brescia.uwo.ca/academics/registrar-services/> or the list of official dates <http://westerncalendar.uwo.ca/2017/pg7.html>). You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. *Note that dropping a course may affect OSAP eligibility and/or Entrance Scholarship eligibility.*

The Dean may refuse permission to write the final examination in a course if the student has failed to maintain satisfactory academic standing throughout the year or for too frequent absence from the class or laboratory (<http://westerncalendar.uwo.ca/2017/pg130.html>)

3. ABSENCES

Short Absences: If you miss a class due to a minor illness or other problems, check your course outline for information regarding attendance requirements and make sure you are not missing a test or assignment. Cover any readings and arrange to borrow notes from a classmate. Contact the course instructor if you have any questions.

Extended Absences: If you have an extended absence, you should contact the course instructor and an Academic Advisor. Your course instructor and Academic Advisor can discuss ways for you to catch up on missed work and arrange academic accommodations, if appropriate.

4. POLICY ON CHEATING & ACADEMIC MISCONDUCT

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences. Students are urged to read the section on Scholastic Offences in the Academic Calendar. Note that such offences include plagiarism, cheating on an examination, submitting false or fraudulent assignments or credentials, impersonating a candidate, or submitting for credit in any course without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course in the University or elsewhere. Students are advised to consult the section on Academic Misconduct in the Western Academic Calendar.

If you are in doubt about whether what you are doing is inappropriate or not, consult your instructor, the Student Services Centre, or the Registrar. A claim that "you didn't know it was wrong" is not accepted as an excuse.

The penalties for a student guilty of a scholastic offence (including plagiarism) include refusal of a passing grade in the assignment, refusal of a passing grade in the course, suspension from the University, and expulsion from the University.

Plagiarism:

Students must write their essays and assignments in their own words. Whenever students take an idea or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar).

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

Computer-marked Tests/exams:

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating. Software currently in use to score computer-marked multiple-choice tests and exams performs a similarity review as part of standard exam analysis.

5. PROCEDURES FOR APPEALING ACADEMIC EVALUATIONS

All appeals of a grade must be directed first to the course instructor. If the student is not satisfied with the decision of the course instructor, a written appeal signed by the student must be sent to the Department Chair. If the response of the department is considered unsatisfactory to the student, she

may then submit a signed, written appeal to the Office of the Dean. Only after receiving a final decision from the Dean may a student appeal to the Senate Review Board Academic. A Guide to Appeals is available from the Ombudsperson's Office, or you can consult an Academic Advisor. Students are advised to consult the section on Student Academic Appeals under Academic Rights and Responsibilities in the Western Academic Calendar (<http://westerncalendar.uwo.ca/2017/pg112.html>).

Note that final course marks are not official until the Academic Dean has reviewed and signed the final grade report for the course. If course marks deviate from acceptable and appropriate standards, the Academic Dean may require grades to be adjusted to align them with accepted grading practices (http://www.uwo.ca/univsec/pdf/academic_policies/exam/evaluation_undergrad.pdf and http://www.uwo.ca/univsec/pdf/academic_policies/exam/finalgrades.pdf).

6. PREREQUISITES

Unless you have either the prerequisites for a course or written special permission from your Dean to enroll in it, you will be removed from the course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisite(s).

7. SUPPORT

Support Services

The Brescia University College Registrar's website, with a link to Academic Advisors, is at <http://brescia.uwo.ca/academics/registrar-services/> . The website for the Student Development Centre at Western is <http://www.sdc.uwo.ca/> .

Mental Health and Wellness

Students may experience a range of issues that can cause barriers to your learning, such as increased anxiety, feeling overwhelmed, feeling down or lost, difficulty concentrating and/or lack of motivation. Services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about mental health and wellness at Brescia at <http://brescia.uwo.ca/life/mental-health-wellness/>. Students who are in emotional/mental distress should refer to Mental_Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

Sexual Violence

All members of the Brescia University College community have a right to work and study in an environment that is free from any form of sexual violence. Brescia University College recognizes that the prevention of, and response to, Sexual Violence is of particular importance in the university environment. Sexual Violence is strictly prohibited and unacceptable and will not be tolerated. Brescia is committed to preventing Sexual Violence and creating a safe space for anyone in the Brescia community who has experienced Sexual Violence.

If you or someone you know has experienced any form of Sexual Violence, you may access resources at <http://brescia.uwo.ca/life/sexual-violence/>.

Portions of this document were taken from the Academic Calendar, the Handbook of Academic and Scholarship Policy and the Academic Handbook of Senate Regulations. This document is a summary of relevant regulations and does not supersede the academic policies and regulations of the Senate of the University of Western Ontario.