

THE UNIVERSITY OF WESTERN ONTARIO
DEPARTMENT OF MATHEMATICS

Mathematics 1228B
Methods of Finite Mathematics

Affiliate College Sections
January - April 2020

INSTRUCTORS: (*Course Coordinator: V. Olds*)

530 (Brescia) - A. O'Hara; 531 (Brescia) - A. Ghorbanpour; 550 (Huron) - M. Palaisti;
570 & 571 (King's) - R. Valluri

(*See Class Schedule and Instructor Contact Information on next page.*)

TEXTBOOK:

Finite Mathematics with Applications, Third Edition by R.G. Biggs and J.T. Moore, published by New Image Publishing Co., ISBN: 88000055455.

PREREQUISITES:

One or more of Ontario Secondary School MCV4U, MHF4U, MDM4U, Mathematics 0110A/B, 1225A/B, 1229A/B.

ANTIREQUISITES:

Mathematics 2124A/B, 2155F/G, the former 2155A/B, Statistical Sciences 2035, 2141A/B, 2857A/B, the former 2657A.

COURSE OUTLINE:

Topics covered include techniques of counting, probability, discrete and continuous random variables. Students are expected to demonstrate an understanding of these concepts and an ability to apply them in solving a variety of problems.

COURSE WEB SITE:

Various useful supplemental materials, such as required extra homework problems, practice tests, and solutions to the homework exercises, are posted on the OWL web site. In addition, there are forums on which students may post questions. Important information will be posted on the NEWS forum and/or on the class page on the web site. All students are expected to be aware of information, and make use of materials, posted on the course web site. As well, some class sections use the online quizzes on the web site as the class work component of the grade.

WHAT IS EXPECTED OF THE STUDENT?

Students should attend all classes, make a serious effort to understand all course material, and do all the assigned homework. The student must assume responsibility for any missed classes. It is up to the student to seek out help when needed. The student is responsible for being aware of **all** relevant information posted on the OWL web site, **especially information posted on the NEWS forum.**

Please contact your course instructor if you require material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x82147 for any specific question regarding an accommodation.

EVALUATION OF STUDENT PERFORMANCE:

Students will be assessed on the basis of Online Quizzes, 2 Term Tests, and a Final Exam.

The Online Quizzes are completed in OWL. See the Quiz Schedule and Quiz Information documents posted on the Course Information page on the site.

The 2 Term Tests, each 90 minutes in length, will be held on:

Saturday February 1 2020, 7:00 - 8:30 p.m. and **Saturday March 7 2020, 7:00 – 8:30 p.m.**

Locations of these tests will be announced in class and/or on the course web site.

The Final Exam will be 3 hours in length, covering all of the course material. This exam will be scheduled by the Registrar's Office during the April Exam Period.

Calculation of Final Grade:

Each Term Test will count for 20%, the student's best 5 of the 6 Online Quizzes will each count for 2%, for a total of 10% and the Final Exam will count for 40%. The remaining 10% weight will be assigned to whichever of the 3 tests/exams is the student's best mark.

Notes:

1. The Term Tests and Exam will all have some multiple choice questions and some written answer questions.
2. **NO calculators or other electronic devices or any other aids are allowed on tests and exams.**
3. See Absence / Missed Work policy on next page.

CLASS SCHEDULE:

Section	Campus	Instructor	Days & Times	Location
530	Brescia	A. O'Hara	MTh 12:30 W 12:30	BR - 303 BR - 201
531	Brescia	A. Ghorbanpour	MWTh 12:30	BR - 203
550	Huron	M. Palaisti	MWF 12:30	HUC W 12
570	King's	R. Valluri	MW 11:30 - 1:00	KUC SA 150
571	King's	R. Valluri	MW 2:30 - 4:00	KUC SA 150

INSTRUCTOR CONTACT INFORMATION: (any changes/updates will be posted in the course OWL web site)

V. Olds (Course Coordinator): volds@uwo.ca, MC 103G, X86520

A. O'Hara (530): aohara@uwo.ca, BUC UH 209 (and MC 113 on main campus)

A. Ghorbanpour (531): aghorba@uwo.ca, BUC UH 209

M. Palaisti (550): mpalaist@uwo.ca, HUC A 211

R. Valluri (570 & 571): valluri@uwo.ca, KUC LH 205 (and PAB 271 on main campus)

Note: Any email sent to an instructor (and especially to the course coordinator) **MUST say Math 1228B in the subject line.** Any email without this, and/or any email sent from other than a UWO email address, may be deleted unread.

SENATE POLICY ON PREREQUISITES:

Prerequisite checking is the **student's responsibility**. Unless you have either the prerequisites for this course or written special permission from your Dean to enroll in it, you may be removed from this 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 prerequisites.

STATEMENT ON ACADEMIC OFFENCES:

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

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.

ABSENCE / MISSED WORK:

If you are unable to meet a course requirement due to illness or other serious circumstances, you must seek approval for the absence as soon as possible. Approval can be granted either through a self-reporting of absence or via the Dean's Office/Academic Counselling unit of your Home Faculty. For approval from Academic Counselling, you must provide valid medical or other supporting documentation *to your Dean's Office as soon as possible*. And in either case you must contact *your instructor immediately*, as soon as you know that you will be unable to complete the required work. It is the student's responsibility to make alternative arrangements with his or her instructor once the accommodation has been approved and the instructor has been informed. For further information, please consult the university's policy on academic consideration for student absences:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic_Consideration_for_absences.pdf.

A student who needs a makeup for an Online Quiz should email the instructor, stating the reason for missing the quiz, as soon as possible after the quiz window closes. Please note that no makeups will be allowed for Quiz 6.

If you miss the Final Exam, please contact your faculty's Academic Counselling Office as soon as you are able to do so. They will assess your eligibility to write the Special Exam (the name given by the university to a makeup Final Exam). You may also be eligible to write the Special Exam if you are in a "Multiple Exam Situation" (see http://www.registrar.uwo.ca/examinations/exam_schedule.html).

SUPPORT SERVICES

Office of the Registrar

UWO	http://www.registrar.uwo.ca
Brescia	http://brescia.uwo.ca/academics/registrar-services/
Huron	http://www.huronuc.on.ca/CurrentStudents/StudentLifeandSupportServices/AcademicResources
King's	http://www.kings.uwo.ca/academics/academic-deans-office/

Student Development Services	http://www.sdc.uwo.ca/
Learning Skills Services	http://sdc.uwo.ca/learning/
USC	http://westernusc.ca/services/
Academic Calendar	http://www.westerncalendar.uwo.ca/
WTS	http://www.uwo.ca/wts/helpdesk

Students who are in emotional/mental distress should refer to Mental Health @ Western via the link given below for a complete list of the options about how to obtain help: <http://www.uwo.ca/uwoom/mentalhealth/>

Mathematics 1228B - Suggested Exercises - Winter 2020

Section	Problems
1.1	1,3,5,7,8,9,10,11,12,13,17. See also exercises on course website.
1.2	1,2,3,5,6,11,13,15,16,18,20.
1.3	1,2,4,5,6,7,8,10,12,13,14,16,18,19.
1.4	2,3,4,6,7,8,10,12,14,15,16,18,22.
1.5	1,4,5,10,11,12,14,15,17.
1.6	1,3,4,5,6,7,13,14,16,19,21,22.
1.7	1,2,3,4,6,7,10,13,17,19,21.
2.1	2,3,5,10,12.
2.2	1,2,4,5,6,7,8,10,11,12,13,14,17,19.
2.3	1,2,4,5,6,8,9,10,11,12,13,16,17,18,19.
2.4	1,2,3,5,7,8,9,11,12,14(a),(b),16,19.
2.5	1,2,3,6,8,11,12,13.
2.6	1,3,6,8,9,13,14,19,20.
2.7	1,2,3,5,7,8,11,12,13,14,16,20,21.
3.1	2,5,6,8,9,11. Additional exercises about $B(n,p)$ posted on course website.
3.3	1,3,4,5,6,9,11,12,13,14,15,16,17,20,21,22.
3.4	1,2,3,4,5,6,10,13,14,15,16.
4.1	1,3,4,5,6,8.
4.2	1,2,4,5,6,7,10(a),(c).
4.3	1,2,3,5,9,10,12,14(a),16,18.
4.4	1,3,5,6,9,12,13,14,15,21.

Notes:

- Page numbers and text references refer to the Biggs & Moore text (*Finite Math with Applications*).
- Any changes to this list will be announced on the NEWS and/or Homework discussion boards.
- Complete solutions for all assigned questions are posted on the course web site.

2019-20 BRESCIA UNIVERSITY COLLEGE ACADEMIC POLICIES AND REGULATIONS

1. POLICY REGARDING ACADEMIC ACCOMMODATION

The complete policy regarding [Accommodation for Illness - Undergraduate Students](http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_12) can be found at http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_12.

Students who have long-term or chronic medical conditions which may impede their ability to complete academic responsibilities should seek Academic Accommodation through Student Accessibility Services (http://www.westerncalendar.uwo.ca/PolicyPages.cfm?PolicyCategoryID=1&Command=showCategory&SelectedCalendar=Live&ArchiveID=#Page_10).

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.

Students who experience an illness or extenuating circumstance sufficiently severe to temporarily render them unable to meet academic requirements may submit a request for academic consideration through the following routes:

1. Submitting a **Self-Reported Absence** form provided that the conditions for submission are met;
2. For medical absences, submitting a **Student Medical Certificate (SMC)** signed by a licensed medical or mental health practitioner;
3. For non-medical absences, submitting **appropriate documentation** (e.g., obituary, police report, accident report, court order, etc.) to their Academic Advisor. Students are encouraged to contact their Academic Advisor to clarify what documentation is acceptable.

Requests for Academic Consideration Using the Self-Reported Absence Portal

Students who experience an unexpected illness or injury or an extenuating circumstance of 48 hours or less that is sufficiently severe to render them unable to meet academic requirements should self-declare using the online Self-Reported Absence portal. This option should be used in situations where the student expects to resume academic responsibilities within 48 hours. Note that the excused absence includes all courses and academic requirements within the up to 48 hours, it is not intended to provide an excused absence from a single course while students fulfill their academic responsibilities in other courses during that time.

The following conditions are in place for self-reporting of medical or extenuating circumstances:

1. Students will be allowed **a maximum of two self-reported absences** between September and April and one self-reported absence between May and August;
2. The duration of the absence will be for a maximum of 48 hours from the time the Self-Reported Absence form is completed through the online portal, or from 8:30 am the following morning if the form is submitted after 4:30 pm;
3. The excused absence will terminate prior to the end of the 48 hour period if the student undertakes significant academic responsibilities (writes a test, submits a paper) during that time;
4. Self-reported absences will **not** be allowed for scheduled final examinations; midterm examinations scheduled during the December examination period; or for final lab examinations scheduled during the final week of term;
5. Self-report absences may **not** be used for assessments worth more than 30% of any course;
6. Any absences in excess of 48 hours will require students to present a Student Medical Certificate (SMC), or appropriate documentation;
7. Students **must** communicate with their instructors **no later than 24** hours after the end of the period covered by the Self-Reported Absence form to clarify how they will fulfil the academic expectations they may have missed during the absence.

Request for Academic Consideration for a Medical Absence

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 their academic responsibilities. Minor ailments typically treated by over-the-counter medications will not normally be accommodated.

The following conditions apply for students seeking academic accommodation on medical grounds:

1. Students must submit their Student Medical Certificate (SMC) 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. An SMC can be downloaded from http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf ;
2. In cases where there might be an extended absence or serious issue, students should submit their documentation promptly and consult their Academic Advisor for advice during their recovery period;
3. Whenever possible, students who require academic accommodation should provide notification and documentation in advance of due dates, scheduled tests or examinations, and other academic requirements;
4. Students **must** communicate with their instructors **no later than 24 hours** after the end of the period covered by the SMC to clarify how they will fulfil the academic expectations they may have missed during the absence;
5. Appropriate academic accommodation will be determined by the Dean's Office/Academic Advisor in consultation with the course instructor(s). Academic accommodation may include extension of deadlines, waiver of attendance requirements, arranging Special Exams (make-ups), re-weighting course requirements, or granting late withdrawal without academic penalty.

The [full policy on requesting accommodation due to illness](#) can be viewed at:

http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_12

2. ACADEMIC CONCERNS

If you feel that you have a medical or personal challenge 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 are not normally considered.

If you think that you are too far behind to catch up or that your work load is not manageable, you should consult your Academic Advisor. If you consider reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines; please refer to the [Registrar's website](#), <http://brescia.uwo.ca/academics/registrar-services/> or the list of official sessional dates in the Academic Calendar (<http://www.westerncalendar.uwo.ca/SessionalDates.cfm?SelectedCalendar=Live&ArchiveID=>).

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.*

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 and warranted.

It is important to note that the Academic 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://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=5&SelectedCalendar=Live&ArchiveID=#SubHeading_68).

4. SCHOLASTIC OFFENCES

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence at: http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_20.

Students are responsible for understanding the nature of and avoiding the occurrence of plagiarism and other academic offences. 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 Scholastic Discipline for Undergraduate Students in the Academic Calendar.

If you are in doubt about whether what you are doing is inappropriate or not, consult your instructor, the Academic Dean's Office, 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.

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 is to be sent to the School Chair. If the response of the Chair is considered unsatisfactory to the student, they may then submit a written appeal to the Office of the Dean. If the student is not satisfied with the decision of the Dean, they may appeal to the Senate Review Board Academic (SRBA), if there are sufficient grounds for the appeal and if the matter falls within the jurisdiction of the SRBA. For information on academic appeals consult your Academic Advisor or see the Student Academic Appeals – Undergraduate in the Academic Calendar http://www.westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#Page_14.

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.

6. PREREQUISITES

Unless you have either the prerequisites for a course or written special permission from the 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/>. Students can access supports through Brescia's Student Life Centre (<http://brescia.uwo.ca/life/student-life/>) and Learning Skills Services at Western (<https://www.uwo.ca/sdc/learning/>)

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 obtain information about how to obtain help for yourself or others through **Mental Health & Wellness at Brescia** (<http://brescia.uwo.ca/life/mental-health-wellness/>) and **Health and Wellness at Western**, http://uwo.ca/health/mental_wellbeing/index.html.

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.
