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|  **SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY** **SAULT STE. MARIE, ONTARIO**COURSE OUTLINE |
| **COURSE TITLE:** | **Business Mathematics** |
| **CODE NO. :** | **MTH125-3** | **SEMESTER:** | **2** |
| **PROGRAM:** | **Parks and Recreation** |
| **AUTHOR:** | **The Mathematics Department** |
| **DATE:** | **January 2014** | **PREVIOUS OUTLINE DATED:** | **January 2013** |
| **APPROVED:** | **“Colin Kirkwood”** | **Nov 25/13** |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_DEAN | **\_\_\_\_\_\_\_****DATE** |
| **TOTAL CREDITS:** | **3** |
| **PREREQUISITE(S):** | **None** |
| **HOURS/WEEK:** | **3**  |
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| *For additional information, please contact Colin Kirkwood, Dean, School of* |
| *Environment, Technology, and Business*  |
| *(705) 759-2554, Ext. 2688* |

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| **I.** | **COURSE DESCRIPTION:**Students will study business math concepts such as statistics, graphing, percentage applications, currency exchange, simple and compound interest, annuities, income/expense statements, balance sheets, and cash flows. Students will use these concepts in applications using spreadsheet software. |

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| **II.** | **LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:** |
|  | Upon successful completion of this course, the student will demonstrate the ability to: |
|  | 1. | Perform basic operations.***Elements of the performance:**** understand and apply the mathematical order of operations
* read and write decimal numbers
* round decimal numbers
* add, subtract, multiply and divide decimal numbers
* determine equivalent fractions
* determine common denominators
* add, subtract, multiply and divide fractional numbers
* convert fractions to decimals
* calculate the exponent of whole numbers
* estimate and approximate results
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|  | 2. | Solve problems by applying fractions, decimals, and percents. ***Elements of the performance:**** convert decimal numbers to percentages and vice versa
* convert fractional numbers to percentages and vice versa
* determine percentages using a formula
* determine percentage increases and decreases using a formula
* solve problems involving sales tax, currency conversions, commissions, cash discounts, and trade discounts
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|  | 3. | Use spreadsheet software, efficiently and effectively, to perform calculations and manipulate data.***Elements of the performance:**** use the common components of Excel spreadsheets
* employ methods that allow changes in data to be made without have to adjust actual formulas
* use Excel to automate the concepts discussed in outcomes 1 and 2 above
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|  | 4. | Apply spreadsheet (Excel) concepts to solve business problems.***Elements of the performance:**** construct and interpret line graphs, bar graphs, and pie charts using Excel
* solve problems involving simple interest calculations, including finding interest, principal, or time, future values, and present values
* calculate loan repayment schedules
* determine future values and present values with compound interest
* determine future value, present value, periodic rent (payment), and term of a simple annuity
* calculate an amortization schedule for a simple annuity
* calculate and interpret simple descriptive statistics including mean, median, mode, and standard deviation
* perform using Excel a linear regression
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| **III.** | ***TOPICS:*** |
|  | *1.* | *Basic Concepts (09 hours)* |
|  | *2.* | *Percentages (09 hours)* |
|  | *3.* | *Introduction to Excel Spreadsheets (12 hours)* |
|  | *4.* | *Business Applications with Excel (15 hours)* |
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| **IV.** | **REQUIRED RESOURCES/TEXTS/MATERIALS:**1. My Math Test CD from the Bookstore  ISBN 0321557077 Prentice Hall Publishing2. Calculator: (Recommended) SHARP Calculator EL-531W. *The use of some kinds of calculators and other devices may be restricted during tests*. |
| **V.** | **EVALUATION PROCESS/GRADING SYSTEM:**Evaluation Methods WeightMyMathTest 20%Class Activities and Assignments 40%Tests 40% 100% |
|  | The following semester grades will be assigned to students in postsecondary courses: |
|  | Grade | Definition | **Grade Point Equivalent** |
|  |  A+ | 90 – 100% | 4.00 |
|  | A | 80 – 89.9% |
|  | B | 70 – 79.9% | 3.00 |
|  | C | 60 – 69.9% | 2.00 |
|  | D | 50 – 59.9% | 1.00 |
|  |  F (Fail) | Below 50% | 0.00 |
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|  |  CR (Credit) | Credit for diploma requirements has been awarded. |  |
|  | S | Satisfactory achievement in field/clinical placement or non-graded subject area. |  |
|  | U | Unsatisfactory achievement in field/clinical placement or non-graded subject area. |  |
|  | X | A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course. |  |
|  | NR | Grade not reported to Registrar's office.  |  |
|  | W | Student has withdrawn from the course without academic penalty. |  |

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| **VI. SPECIAL NOTES:**Attendance:Sault College is committed to student success, There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session |
| **VII.** | **COURSE** **OUTLINE** **ADDENDUM**: |
|  | 1. | Course Outline Amendments:The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources. |
|  | 2. | Retention of Course Outlines:It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions. |
|  | 3. | Prior Learning Assessment: Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic |
|  |  | Calendar of Events for the deadline date by which application must be made for advance standing. |
|  |  | Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio. |
|  |  | Substitute course information is available in the Registrar's office. |
|  | 4. | Accessibility Services:If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Accessibility Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you. |
|  | 5. | Communication:The College considers ***Desire2Learn (D2L)***as the primary channel of communication for each course.  Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information.  Success in this course may be directly related to your willingness to take advantage of this Learning Management System (LMS) communication tool. |
|  | 6. | Plagiarism:Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. Students who engage in academic dishonesty will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material. |
|  | 7. | Tuition Default:Students who have defaulted on the payment of tuition (tuition has not been paid in full, payments were not deferred or payment plan not honoured) as of the first week of March will be removed from placement and clinical activities due to liability issues. This may result in loss of mandatory hours or incomplete course work.  Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress. |
|  | 8. | Student Portal:The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations, in addition to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to <https://my.saultcollege.ca>. |
|  | 9. | Electronic Devices in the Classroom:Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction.  With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.  |
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