School of Continuing and Professional Studies
Undergraduate Programs
LL 206: Advanced Math for Professional Studies

Instructor:  John Hemmerling
jhemmerl@depaul.edu
312-476-4358

Course Dates: Winter 2020
Course Location and Delivery Format:  This is an online class using D2L and My MathLab.

Course Description
This class is 4 credit hours covering college algebra concepts that professionals can use for modeling: Functions and their graphs, exponential and logarithmic functions, inverse functions, polynomial and rational functions. Students will use graphing extensively to learn how these functions map into graphs of varying shapes and purposes. Students will use graphing software to map and solve functions. Emphasis will be on how algebra can be used in the workplace. The class will also allow students to review the prerequisite algebra needed to manipulate and solve equations and functions.

Learning Outcomes
Through practice in algebra and graphing, students will be able to do the following:
• Understand equations and inequalities
• Understand how equations translate to functions.
• Can using online graphing software to graph linear and nonlinear functions (including polynomial, rational, Power, Root, Inverse, Exponential and Logarithmic functions.)
• Can use graphing techniques to evaluate linear and non-linear functions.
• Understands Absolute Value functions and Inequalities.
• Can evaluate equations with Complex Numbers.
• Understands and can evaluate inverse operations.
• Can evaluate exponential and logarithmic functions.

Learning Strategies & Resources
Required Textbook:  A Graphical Approach to College Algebra; Hornsby, Lial and Rockswold
ISBN-10: 0134696522
Note: MyMathLab is required for this course. MyMathLab is included only with the purchase of a new textbook. If you buy a used textbook you must purchase MyMathLab access separately.
Required: MyMathLab (Text Book Website)

The required textbook has an excellent supporting website called MyMathLab. In addition to an electronic version of the published material in the book, this website also has many wonderful resources that include video lectures, animated examples, homework, quizzes, a custom study plan and tutoring.

You can pay for access to My Math Lab when you log into the MML website for this class. The instructor will provide a Course ID to use when you log into MML.

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https://www.pearsonmylabandmastering.com/northamerica/mymathlab/

Required Software: Microsoft Excel

Strongly Recommended: Basic Training in Excel.

Strongly recommended: Lynda.com Excel tutorials
Lynda.com is free to DePaul students and offers a wide range of Excel tutorials.

Students will use the resources of the My Math Lab website to learn and practice the algebraic principles detailed in the Learning Outcomes above. The My Math Lab website has the following resources: E-Book, Video Lecture, PowerPoint Presentations, Interactive Practice, detailed Study Plan and quizzes/tests. Students who plan to take the math placement test should use these resources to prepare for that test.

Resources to learn more about graphing and modelling will be provided in D2L. These resources will include links to helpful websites and podcasts.

Learning Deliverables (graded evidences of learning)
There are 5 module quizzes that must be completed in My Math Lab, one for each module. Each quiz is 100 points. There are 3 Excel projects: Linear Models, Polynomial Models and Exponential Models.

Grading Criteria & Scale

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<thead>
<tr>
<th>Excel Projects</th>
<th>Module Quizzes</th>
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<tr>
<td>40%</td>
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<td>Module</td>
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Any grade lower than C- is unacceptable for the SCPS Lifelong Learning or Major requirements. Students can opt for a Pass/Fail grade but must earn a 70% or higher to receive the PA grade. A PA grade does not factor into a student’s GPA but a failing grade does.
Insert schedule/outline for each course session—as related to outcomes or competencies: topics/themes, learning strategies, assignments, readings/resources, due dates, etc. Include exam week final deliverable in the 11th week in full term courses; and 6th week in short courses. If this schedule/outline is subject to change during the course, state so here in the syllabus and include a description of the process whereby changes will be made and communicated. For online, describe the typical/general module pace (e.g., discussions due Tu, S; written assignments due M; new modules initiate on M etc.)

Course Policies
This course includes and adheres to the college and university policies described in the links below:
- Academic Integrity Policy (UGRAD)
- Academic Integrity Policy (GRAD)
- Incomplete Policy
- Course Withdrawal Timelines and Grade/Fee Consequences
- Accommodations Based on the Impact of a Disability
- Protection of Human Research Participants
- APA citation format (GRAD)
- University Attendance Policy

Other Resources for Students
- University Center for Writing-based Learning
- SNL Writing Guide
- Dean of Students Office

Instructor Brief Bio
John Hemmerling began his career with SNL as an academic advisor in 1992. He began teaching courses at SNL in 1997 and has been nominated for an excellence in teaching award two times. He has a BS in Mathematics (Chicago State) and a MA in Math Education (DePaul).