**VALENCIA COLLEGE**

**MAC 2233 Calculus for Business and Social Sciences**

**Spring 2020 CRN 21174**

**Class: Monday, Wednesday, Friday 8:30 am – 9:45 am, in 1-271**

**Instructor Information:**Liudmila Kashirskaya

**E-mail:**[**lkashirskaya@valenciacollege.edu**](mailto:lkashirskaya@valenciacollege.edu)

(Please include your name and course number in all emails).

**Student Engagement Hours:**

***Online hours* (via email):** Monday - Sunday:  10:00 am – 11:00 am

**Consultations:** Monday, Wednesday 10:00 am - 11:00 am, room 2-115

 Appointments can be made upon request (via email).

**This syllabus is a contract between the student and the instructor.  By enrolling in and then attending this course, the student agrees to and accepts the terms and conditions of this contract.  It is the responsibility of the student to carefully read this syllabus/contract in its entirety and to adhere to all policies and procedures within the syllabus.**

**DESCRIPTION:**         Prerequisite: Minimum grade of C in MAC 1102 or MAC 1104 or MAC 1105 or appropriate score on an approved assessment. Introduction to calculus with applications to business and social science.  Topics include differentiation and integration of algebraic, exponential and logarithmic functions, rates of change, curve sketching, and applications of the derivative and integration.  Gordon Rule course.  A minimum grade of C is required if MAC 2233 is used to satisfy the Gordon Rule and general education requirements.

**Major Topics/ Concepts**

                                    - tangent and rate of change problems

                                    - limits and continuity

                                    - derivatives and their application

              - integrals and their applications areas of regions applications to business and the social sciences

**COURSE OUTCOMES:**

Upon successful course completion, the student will achieve the following outcomes:

1. **Demonstrate an understanding of the limiting process as it applies to functions, continuity, derivatives, and integrals.**
2. **Demonstrate an understanding of the concept of the derivative.**
3. **Calculate indefinite and definite integrals.**
4. **Solve applied problems using derivatives and integrals.**

 To each corresponding course outcome, students will develop the abilities to Value, Think, Communicate, and Act through the following **Assessments:**

* Classroom assessment
* Group presentation
* Knowledge recall quiz
* Locally developed exam/objective
* Locally developed multiple choice exam
* Problem-solving quiz
* Project

**REQUIRED MATERIALS:**

**TEXT:**   [*Brief Calculus for the Business, Social, and Life Sciences, 3rd Edition, © 2014, by Armstrong and Davis*](http://www.jblearning.com/catalog/9781449695163/)

**CALCULATOR:**Graphing Calculator ([TI-83](http://education.ti.com/us/product/tech/83/guide/83guideus.html) ,­­ or [TI-83 Silver .](http://education.ti.com/us/product/tech/83pse/guide/83pseguideus.html)recommended**).**  The student is not permitted to store information or unapproved programs in the calculator.

**ATTENDANCE:**Attendance will be taken at every class meeting.  If a student should need to miss class, he/she should contact the instructor as soon as possible.

**ATLAS:**  Throughout the semester, the instructor may send e-mails pertaining to the course through the ATLAS system.  The student is responsible for checking his/her ATLAS e-mail account regularly. All e-mails received from students will be responded to within 24-48 hours, Monday through Sunday.

**HOMEWORK:**           Homework will be assigned at each class meeting.  The student is expected to attempt every problem before coming to class. With notice, students may be asked to put completed homework up on the board to be discussed in a class.

**Group Work:**

Each week you will work in groups with your classmates to complete math activities relevant to the current course content. These activities will help reinforce the skills and concepts watched in the weekly Worksheets. You must be present in class to obtain the activity points. Group work is due the following class.

There will be a number of interactive activities in class that will provide additional ways of learning. Here are sample activities:

* + - * Adapting textbook case studies to relate to students’ lives.
      * Rotating to present homework assignments in front of the class.
      * Collaborative small-group and paired activities, such as think-pair-share, write-pair-share techniques.

**QUIZZES:      T**here will be two types of quizzes: in-class quizzes and take-home quizzes. The problems of these quizzes will usually be taken from the textbook. Doing the homework will help to prepare you for the quizzes. Quizzes are open book but are to be done individually without help from others. Take-home quizzes are due in the first 10 minutes of the next class period. Late assignments will not be accepted. In-class quizzes will be given either at the beginning or the end of the class.

**ADDITIONAL ASSESSMENT:**Student surveys will be administered at the beginning and at the mid-point of the course.

* The survey at the beginning of the course will focus on student career goals, learning preferences, and students’ mathematical background.
* The survey at the mid-point of the course will re-assess the effectiveness of teaching and learning approaches used in the course, course satisfaction, and applicability of material to the diverse student backgrounds.

**EXAMS:**There will be three in-class exams and a comprehensive final. Exam problems are similar to homework problems, examples in the book and/or examples worked in class. There will be no make-up exams. If the absence is excused by college policy (e.g., religious holidays or college-sponsored events requiring a student's attendance) or an exam is missed for another legitimate reason (to be determined by the instructor) then the final exam score will be applied proportionately as the score for the one missed exam. Your lowest test grade will be replaced by the final exam, if you score 75% or higher and if beneficial to your grade. If you fail to show for the final exam, you will receive a zero.

**GRADING:**The grading scale is as follows:

|  |  |
| --- | --- |
| Group work | 10% |
| Quizzes | 15% |
| Unit Tests (Exams) | 45% |
| Project | 10% |
| Final Exam | 20% |
| Total | 100% |

90 – 100% = A;

80--89.9% = B;

70--79.9% = C;

60--69.9% = D;

Below 60% = F.

**WITHDRAWAL DEADLINE:**Per Valencia Policy 4-07 (Academic Progress, Course Attendance and Grades, and withdrawals), a student who withdraws from the class before the withdrawal deadline of **March 20, 2020** will receive a grade of “W.”  A student is not permitted to withdraw after the withdrawal deadline.  A faculty member MAY withdraw a student up to the beginning of the final exam period for violation of the class attendance policy. A student who is withdrawn by faculty for violation of the class attendance policy will receive a grade of “W.”  Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of “F.”  For a complete policy and procedure overview on Valencia Policy 4-07 please go <http://valenciacc.edu/generalcounsel/policydetail.cfm?RecordID=75>

**IMPORTANT DATES:**

**Classes do not meet**: January 20-th, February 14-th, Spring Break March 9-th-March 15-th.

**Final Exam:**  Wednesday, **April** -**22-nd**, 7:00 am-9:30 am

**What to do if you do not understand or need help:**

|  |
| --- |
| ·         **Review your notes.**  Rework the examples provided in class.  See if it still makes sense!  ·         **Read the textbook** **(really)**.  The text is well written and has many examples for you to follow.  ·         **Contact your instructor!** I am available by email or after class, or on Monday, Wednesday from 10 a.m. to 11 a.m., room 2-115.  ·         **Visit the**[Math Support Center](http://east.valencia.cc.fl.us/math/msceast/home.htm)   (4-102) for help with homework or general tutoring or check out the collection of videotapes in the library dealing with the course material. |

**Please note:**  Always seek advice and guidance from your instructor and/or counselor before withdrawing from the class.  Seeing your counselor influences any financial aid or Bright Futures that you may be receiving.

**CLASSROOM CONDUCT POLICY:**

To promote a learning environment in which you as a student may receive the greatest consideration, we will do all we can to prevent unnecessary interruptions and class disruptions. To this end, I remind you to adhere strictly to the following policies:

1. **Everyone is required to be in class on time.** Anyone entering the classroom after the instructor has begun class is late and is a disruption to the class.  The instructor must implement an appropriate policy to discourage late arrivals.
2. **The student must have prior consent of the instructor before leaving the class early.** If you must leave class early, notify the instructor before the beginning of class.  We do not conduct “open” classrooms where individuals may arrive and exit at their discretion.  This activity is disruptive to those trying to learn and will not be allowed.
3. **The instructor is not to allow talking or other inappropriate distractions to occur.**  Talking or other disruptive behavior (including all electronic devices except approved graphing calculators) is a distraction to other students and has no place in a college environment.  Students who engage in such behavior will be asked to stop.
4. **NO FOOD OR DRINK IS ALLOWED IN THE CLASSROOM.**
5. Infractions of discipline may be handled by the instructor as final authority**.**

**CELL PHONES:**Students are required to turn off all cell phones and pagers before the beginning of class. If a cell phone or pager vibrates or is audible, the student may be asked to turn it off or leave for the remainder of the class. If there is an emergency warranting the use of a cell phone or pager during class time, the student must notify the professor in writing prior to the beginning of class. **During a testing situation, if a cell phone or pager vibrates or is audible, the student’s quiz, test, or examination may be collected and the student may be asked to leave without an option for completion.**

**VALENCIA I.D. CARDS:**Valencia ID cards are required for LRC, Testing Center, and IMC usage. No other form of ID at those locations will be accepted. Possession and utilization of a Valencia ID is mandatory to obtain these services.

**COMPUTER/EQUIPMENT USE POLICY:       U**se of computers in the Business, IT, and Public Service classrooms at Valencia College is restricted to those activities designated by the instructor to enhance the class materials. Any other use is strictly forbidden. Inappropriate use includes, but is not limited to:

* Use of computer to send E-mail or access Internet sites not specifically assigned in class.
* Use of computer for a job, internship, homework or other activities not assigned in class.
* Modifying any hardware or software system configuration or setting.
* Activities not in accordance with the Valencia Student Code of Conduct

Use of computers in the departmental open lab is limited to those activities involved with preparing homework or coursework in this department and is subject to the same restriction as listed above.

**EAST CAMPUS MATHEMATICS REQUIRED COMMON SYLLABUS CONTENT**

**STUDENT CODE OF CONDUCT:** All students are expected to be following Valencia College’s policy on student code of conduct.

<http://valenciacollege.edu/generalcounsel/policy/documents/Volume8/8-03-Student-Code-of-Conduct.pdf>

**ACADEMIC HONESTY:** All students are expected to be in compliance with Valencia College’s policy on academic honesty.

<http://valenciacollege.edu/generalcounsel/policy/documents/8-11-NF-NN-Academic-Dishonesty.pdf>

**WITHDRAWAL POLICY:** <http://valenciacollege.edu/generalcounsel/policy/documents/Volume4/4-07-Academic-Progress-Course-Attendance-and-Grades-and-Withdrawals.pdf>

**EAST CAMPUS LEARNING ASSISTANCE RESOURCES:** Tutoring services are provided on Valencia College’s East campus at the Learning Support Center in Building 4 – Room 101. The East Campus Learning Support Center strives to provide a safe, inclusive learning environment that motivates students to maximize learning opportunities, grow toward independence, and discover the lifelong learner within. <http://valenciacollege.edu/east/academicsuccess/>

* **Math Support at the Learning Support Center**: The Math Center in Building 4 – Room 102 provides individual assistance to all Valencia students enrolled in any math course. Resources include walk-in tutoring, homework assistance, group tutoring, final exam reviews, PERT information, academic refreshers, and much more. The SPA (Specialized Prep Area) provides specific resources to students in entry level mathematics courses including study sheets for most mathematical concepts. Please check hours of availability at the following link: <http://valenciacollege.edu/east/academicsuccess/math/>
* **Valencia’s Math Help 24/7:** Valencia Math professors have created pen-casts and videos of common lessons to help you learn the concepts being presented in class. This resource is located at [www.valenciacollege.edu/math/livescribe.cfm](http://www.valenciacollege.edu/math/livescribe.cfm) Click on your course to view your lessons. Some lessons have more than one professor’s perspective; watch more than one!
* **Smart Thinking (Online Tutoring):** Smarthinking is an online tutoring tool available to all of Valencia’s students, and math tutors are available 24/7. Students can access Smarthinking through the Courses tab in Atlas. Students have an eight hour limit of usage per semester, and therefore, Smarthinking is best used as a back up to on-campus services and support, not as a replacement. There are Smarthinking phone applications for both iOS and Android devices. <http://valenciacollege.edu/east/academicsuccess/onlineTutoring.cfm>
* **Collegewide Math Support information:** <http://valenciacollege.edu/learning-support/>

**STUDENTS WITH DISABILITIES:** Valencia students who qualify for academic accommodations must provide the professor with a Notification to Instructor (NTI) from the Office for Students with Disabilities (OSD). Students are expected to discuss their specific needs with the professor, preferably during the first two weeks of class. OSD determines accommodations based on appropriate documentation of disabilities. East: Bldg. 5, Rm. 216 Ph: 407-582-2229 Fax: 407-582-8908 TTY: 407-582-1222. Here are the campus locations and contact numbers: <http://valenciacollege.edu/osd/default.cfm>

**NOTE TO INTERNATIONAL STUDENTS (F-1 OR J-1 VISA):** Please be advised that withdrawal from this course due to attendance may result in the termination of your visa status if you fall below the full-time enrollment requirement of 12 credit hours. Contact Valencia’s International Student Services office for more information. <http://valenciacollege.edu/international/>

**CORE COMPETENCIES OF A VALENCIA GRADUATE:**

Valencia’s Student Core Competencies are complex abilities that are essential to lifelong success. This course will help you to develop and demonstrate the abilities to:

1. THINK clearly, critically, and creatively;
2. COMMUNICATE with others verbally and in written form;
3. Make reasoned VALUE judgments and responsible commitments;
4. ACT purposefully, reflectively, and responsibly.

Due to the nature of these global competencies, many of the problems will be presented in the context of an application. These applications will require students to select appropriate information from the problem and communicate effectively in order to explain and/or describe how the student used the skills they are learning to arrive at an appropriate solution for the problem.

**STUDENT FEEDBACK ON INSTRUCTION:** Near the end of the term, students will receive an invitation through their Valencia ATLAS email account asking them to complete the Student Feedback on Instruction (SFI). This survey provides Valencia College professors with feedback on students’ experiences in courses and helps them to continually improve their courses. The results are released only *after* grades are submitted and students’ names are *not* included in the results – all responses will be anonymous.

**STUDENT ASSISTANCE PROGRAM:** Valencia College has contracted with a private and confidential counseling service (**Bay Care Behaviorial Health Student Assistance Program (SAP)**) to provide FREE short-term assistance to students who need to resolve problems that are affecting their college performance. Examples might include: stress, relationship/family issues, alcohol/drug problems, eating disorders, depression, and gender issues. Students who are experiencing any of these issues and who are enrolled in credit classes at Valencia should call the toll-free number 1-800-878-5470 to speak to a professional counselor. If needed, the counselor may refer the student to appropriate resources or to speak face-to-face with a licensed counselor. For more information, call or visit a Counselor in Student Services on any campus.

**FERPA** *(Family Educational Rights and Privacy Act)*: FERPA is a Federal law that is administered by the Family Policy Compliance Office (Office) in the U.S. Department of Education (Department). 20 U.S.C. § 1232G; 34 CFR Part 99. FERPA affords students certain rights with respect to their educational records. Valencia College has a firm commitment to protecting the privacy rights of its students. For further information on FERPA, see: <http://valenciacollege.edu/ferpa/default.cfm#whatis>

**TITLE IX:** Valencia College strives to be a place free from all forms of discrimination. Title IX protects students from discrimination based upon sex including protections against sexual violence, domestic violence, and stalking. This also includes protections for students who are pregnant or may become pregnant. If you experience sexual violence, domestic violence, or stalking and would like assistance there are several options available to you. Valencia partners with the Victim Service Center of Central Florida which is a confidential resource available 24/7. They can be reached by calling 407-497-6701. If you would like assistance on campus, you can go to valenciacollege.edu/eo or contact Valencia College’s Title IX and Equal Opportunity Officer, Ryan Kane, by emailing [rkane8@valenciacollege.edu](mailto:rkane8@valenciacollege.edu). If you would like to report to law enforcement, you may visit Campus Security or call 911.

Please note that there are no confidential resources on campus. As your professor, I am required to report any information mentioned in this statement to the appropriate campus resources. This will include your name, and detailed information shared with me. We take privacy very seriously at the College and only those who have a legitimate need to know the information will be provided with this information.

If you have more questions about Title IX or the College’s response, please visit valenciacollege.edu/eo.

**DISCLAIMER:** Changes in the syllabus, schedule, evaluation procedures, and/or homework assignments may be made at any time at the discretion of the professor. In case you are absent, it is **your** responsibility to find out what, if any, announcements or changes have been made.