I: Course Information

- **Course Description:** The course covers material on the techniques of single- and multivariate calculus and includes methods and applications regarding rates of change, derivatives, antiderivatives, integration, differential equations, partial derivatives, and extreme values of functions.

- **Prerequisites:** This course requires a grade of C or better in MTH 148.

- **Section and Instructor Information:**

<table>
<thead>
<tr>
<th>Section</th>
<th>Days</th>
<th>Times</th>
<th>Instructor</th>
<th>Email</th>
<th>Office#</th>
<th>Phone</th>
<th>Office Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MTTrF</td>
<td>9:10-10:00am</td>
<td>Suen</td>
<td><a href="mailto:c.suen@csuohio.edu">c.suen@csuohio.edu</a></td>
<td>RT1505</td>
<td>216-523-7163</td>
<td>MW: 10:10am-12:10pm</td>
</tr>
<tr>
<td>2</td>
<td>MWTrF</td>
<td>10:15-11:05am</td>
<td>Moore</td>
<td><a href="mailto:t.a.moore94@csuohio.edu">t.a.moore94@csuohio.edu</a></td>
<td>RT1528</td>
<td>216-523-7156</td>
<td>M,W, Tr: 11:15-12:15pm T: 10:15-12:15pm F: By Appt Only</td>
</tr>
<tr>
<td>3</td>
<td>MTTrF</td>
<td>1:30-2:20pm</td>
<td>Suen</td>
<td><a href="mailto:c.suen@csuohio.edu">c.suen@csuohio.edu</a></td>
<td>RT1505</td>
<td>216-523-7163</td>
<td>MW: 10:10am-12:10pm</td>
</tr>
<tr>
<td>4</td>
<td>MTTrF</td>
<td>1:30-2:20pm</td>
<td>Bellini</td>
<td><a href="mailto:s.bellini@csuohio.edu">s.bellini@csuohio.edu</a></td>
<td>RT1504</td>
<td>216-523-5247</td>
<td>TTr 2:45-3:30pm By Appt</td>
</tr>
<tr>
<td>5</td>
<td>TTr</td>
<td>2:00-3:50pm</td>
<td>Sheridan</td>
<td><a href="mailto:s.p.sheridan@csuohio.edu">s.p.sheridan@csuohio.edu</a></td>
<td>RT1531</td>
<td>216-687-9248</td>
<td>T: 10:00-11:00am Tr: 12:45-1:45pm By appt</td>
</tr>
<tr>
<td>50</td>
<td>TTr</td>
<td>4:00-5:50pm</td>
<td>Bellini</td>
<td><a href="mailto:s.bellini@csuohio.edu">s.bellini@csuohio.edu</a></td>
<td>RT1504</td>
<td>216-687-5247</td>
<td>TTr 2:45-3:30pm By Appt</td>
</tr>
<tr>
<td>501</td>
<td>WEB</td>
<td>TBD</td>
<td>Manouchehri</td>
<td><a href="mailto:m.manouchehri@csuohio.edu">m.manouchehri@csuohio.edu</a></td>
<td>RT1555</td>
<td>216-687-7439</td>
<td>MTWTTrF: 12:30-1:30pm</td>
</tr>
<tr>
<td>980</td>
<td>Sat</td>
<td>8:30am-12:30pm</td>
<td>Manouchehri</td>
<td><a href="mailto:m.manouchehri@csuohio.edu">m.manouchehri@csuohio.edu</a></td>
<td>RT1555</td>
<td>216-523-7439</td>
<td>MTWTTrF: 12:30-1:30pm</td>
</tr>
</tbody>
</table>

- **Course Goals and Objectives:** Upon completion of this course, students will:
  - understand the concepts of limits, rates of change, derivatives, and applications of these concepts
  - work with anti-derivatives, integration, and their applications
  - study methods and applications of multivariate calculus
MTH 149 – Business Mathematics II – Syllabus, Spring 2015
Cleveland State University
Department of Mathematics


The text is available from the Cleveland State University Bookstore. The cost of the text and MyLabsPlus access is included in the course fee for MTH 149. You will not be charged for the text at the bookstore. Please take a copy of your ID and your schedule to the CSU Bookstore to confirm your enrollment in the course when going to pick up the course materials.

II: Instructional Resources

- **Blackboard Learn:** This course will, at minimum, use Blackboard Learn as the primary means of accessing MyLabsPlus (The online homework component of the course). Blackboard may be accessed directly through the link [https://mycsu.csuohio.edu/elearning/blackboard/bbindex.html](https://mycsu.csuohio.edu/elearning/blackboard/bbindex.html) or by following “MyCSU” from the top right of the main CSU website at [http://www.csuohio.edu/](http://www.csuohio.edu/). After selecting “MyCSU”, the link to Blackboard is found in the “For Students” column. Log in to Blackboard using your CSU ID# and your CampusPass password. (This is the same password you use to access CampusNet.)

- **Math Learning Center (MLC):** Math Learning Center is your source for free Mathematics Tutoring; homework assistance; and exam preparation. MLC is a drop-in center, so no appointment is necessary. MLC is located in Main Classroom 230 (MC 230). Please bring your course materials and student ID with you to receive assistance. Assistance is first-come/first-served, so it is of benefit to make use of MLC as early as the need arises. Student-use PCs are available for working on one’s online homework. For this course, a series of exam-prep reviews will be made available, approximately one week before each in-class exam. Exam-prep reviews are administered like exams, and are meant to help students determine what material they know, and do not know, in advance of an actual exam. (Note: Exam-prep reviews do not mirror in-class exams.)

MLC hours are as follows:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday-Thursday</td>
<td>9:00am-8:00pm</td>
</tr>
<tr>
<td>Friday</td>
<td>9:00am-4:00pm</td>
</tr>
<tr>
<td>Saturday</td>
<td>10:00am-2:00pm (Beginning Saturday, January 31st, 2015)</td>
</tr>
</tbody>
</table>

- **Math Emporium:** The Math Emporium is a large computer lab on the 2nd floor of the Schwartz Library. The Emporium is primarily intended for use by students in Developmental Mathematics Courses. At times, however, seats will be available for use by students in other courses. The PCs in this lab are setup specifically for working with the online components for mathematics courses. Please note that this is not a general purpose lab and is not set up for use with software or online sites not related to CSU undergraduate mathematics courses.
III: Coursework and Assessment

- Homework (20% of your final grade, or 200 points towards final grade):
  Homework is handled through the online system MyLabsPlus, a publisher-designed system intended to accompany the course textbook. There are three different types of assignments.

  **Homework 1: Orientation to Solving Problems in MLP:**
  This assignment deals with usage of the MyLabsPlus system and is not related to any direct course material.
  **Due Date:** This assignment is due no later than Wednesday, January 14th, 2015.
  **Point Value:** 10

  **Homework 2-21: Section Assignments:**
  These assignments are broken down by units or sections and relate directly to course material. They correspond to content in one or more sections of the course textbook.
  **Due Date:** Varies by assignment (see course schedule for due dates)
  **Point Value:** 10 per individual homework assignment

  **Unit Reviews:**
  Unit review homework assignments are included to assist in preparation for exams. They cover a wide array of testable material related to each tested unit of the course. Each of the unit reviews is not limited in terms of number of attempts and will have two due dates. The first due date is prior to the exam for the given unit. Unit Review homeworks will close after that exam. They reopen beginning the last week of class and have a second due date set during finals week for the comprehensive final exam. This makes each unit review useful twice, for unit exams and the comprehensive final. Each unit review is worth 10 points. Chapter 14 review closes during Finals week only, and does not have a preliminary due date.
  **First Due Date:** Varies by Unit Review (see course schedule for due dates)
  **Second Due Date:** Thursday, May 7th, 2015 at 11:59pm
  **Point Value:** 10 per unit review
  **NOTE:** There is not unit review for the final exam

To Access MyLabsPlus:
Go to [https://bblearn.csuohio.edu/MACAuth/login.jsp](https://bblearn.csuohio.edu/MACAuth/login.jsp)
Enter CSU ID#
Enter Campusnet password
Click “Login”
or-
Go to [http://www.csuohio.edu](http://www.csuohio.edu)
Click on “MYCSU” in the upper right-hand corner of the browser window
In the “For Students” section, under “Academic Resources” click on Blackboard
Enter CSU ID#
Enter Campusnet password
Click “Login”
Once inside Blackboard, click on the link for your course
After your course Blackboard loads, click on “Tools” in the left-hand menu
When the Tools window loads, click on “MyLabsPlus Bridge”

NOTES:
Upon first access from a computer, MyLabsPlus may take some time to load.
Configuration documents for specific browsers are available to setup a browser to use MyLabsPlus
Google Chrome or Mozilla Firefox are the preferred browsers for operating MyLabsPlus

Other Homework Policies:
Assignments are due by 11:59pm on the dates listed in MyLabsPlus and listed on the course syllabus.
Extensions for homework due dates are not provided without valid documentation confirming extended absence from class.
Do not wait until the last day to start a homework assignment.
Inability to access MLP is not accepted as a valid excuse for late homework, except in lieu of a system-wide event. System-wide events are monitored by the course coordinator and instructors will be informed of any need to adjust based on a system-wide outage. Please note that difficulty accessing MLP from your home PC or from a campus PC is not confirmation of a system-wide event worthy of an extension.
“I did not know it was due” is not considered a valid excuse. Due dates are listed in MyLabsPlus and on the course syllabus.

- **Unit Exams (45% of your final grade, or 450 points towards final grade):**
  There will be three unit exams. **Unit exams, regardless of day and time, are 50 minutes max.**
  Each unit exam is worth 150 points and is comprised of questions taken similar to* the questions found in the online homework component of the course.
  Each unit exam is worth 15% of your final grade. Each unit exam has an accompanying unit review available in Math Learning Center, again with questions similar* to the online homework.
  Exams are closed book and closed notes and formula sheets are not provided.
  Please see the course calendar for weeks when unit exams will be administered.
  Exams require written work. A correct answer is not worth full credit on exam problems where work is required. Show all work at all times. Where calculators are used, write out all calculator entries in lieu of work.
  *“similar to” means questions pertaining to the same course content and is not meant to imply anything about the direct wording of any specific exam question.

- **Unannounced Written Quizzes (10% of your final grade, or 100 points towards final grade):**
  There will be 7 quizzes throughout the semester.
  Each quiz is worth 10 points.
  Missed quizzes may not be made up for any reason.
  The two lowest quiz grades will be dropped, allowing students to miss up to 2 quizzes due to absence.
*Quizzes for the section 501 course will be handled through MLP. Your Instructor will announce the due dates.

- **Final Exam (25% of your final grade, or 250 points towards final grade):**
  - The final exam is mandatory and comprehensive.
  - All covered content is eligible for testing on the final.
  - Chapter 14, which is not included on a unit test, is tested on the final.
  - Textbooks and notes are not permitted on the final exam.

- **Final Exam Schedule:** Final Exams are held in the scheduled classroom for the course:

<table>
<thead>
<tr>
<th>Section</th>
<th>Course Days</th>
<th>Course Times</th>
<th>Final Exam Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MTTrF</td>
<td>9:10-10:00am</td>
<td>Fri, May 8th</td>
<td>8:00am-10:00am</td>
</tr>
<tr>
<td>2</td>
<td>MWTrF</td>
<td>10:15-11:05am</td>
<td>Mon, May 4th</td>
<td>10:15am-12:15pm</td>
</tr>
<tr>
<td>3</td>
<td>MTTrF</td>
<td>1:30-2:20pm</td>
<td>Wed, May 6th</td>
<td>12:30pm-2:30pm</td>
</tr>
<tr>
<td>4</td>
<td>MTTrF</td>
<td>1:30-2:20pm</td>
<td>Wed, May 6th</td>
<td>12:30pm-2:30pm</td>
</tr>
<tr>
<td>5</td>
<td>TTr</td>
<td>2:00-3:50pm</td>
<td>Thu, May 7th</td>
<td>12:30pm-2:30pm</td>
</tr>
<tr>
<td>50</td>
<td>TTr</td>
<td>4:00-5:50pm</td>
<td>Tue, May 5th</td>
<td>4:00pm-6:00pm</td>
</tr>
<tr>
<td>501</td>
<td>TBD*</td>
<td>TBD*</td>
<td>TBD*</td>
<td>TBD*</td>
</tr>
<tr>
<td>980</td>
<td>Sat</td>
<td>8:30-12:30pm</td>
<td>TBD*</td>
<td>TBD*</td>
</tr>
</tbody>
</table>

*Section 501 final exam testing is scheduled with the instructor. Section 980 will hold its final exam on the last Saturday the class meets. The instructor will announce the date accordingly.*

The Comprehensive component of the final exam does not have a unit review available in Math Learning Center. Please consult MyLabsPlus unit review homework assignments when preparing for the Final Exam.

- **Calculator Policy:**
  - Usage of a TI-83/84 family calculator is required for this course.
  - Only a calculator may be used for exams.
  - Phones, tablets and laptops may not be used, or accessed at any point during exams.
  - Calculator apps or programs on phones, tablets, or laptops may not be used during exams.

- **Exam Replacement:**
  - The percentage score on the comprehensive final will be used to replace the lowest exam score as long as the following conditions are met:
    - All unit exams have been attempted and have scores above 0
    - The student has required no more than one makeup exam due to valid excuse
    - The final exam percentage must exceed the lowest unit test score
    - Only one unit test score is replaced
  - The exam replacement may not be used to replace a missed exam, and it not a valid reason for skipping a unit exam.
• **Make-up Policy:**
  Instructors should be advised of an absence on an exam date prior to the beginning of the exam. Instructors may be contacted by phone or email. In the event of a sudden emergency, the instructor should be notified as soon as possible, not upon the next class the student attends. Any absence on a scheduled test date is required to have accompanying proof-of-absence documentation upon return. Except in the event of a documented extended absence, all makeup exams and quizzes need to be taken within two scheduled class dates of the missed exam. Students are responsible for arranging makeup exams with instructors. Instructors reserve the right to deny makeup exams in the absence of documentation confirming cause for absence, or if exams are not taken within two class dates of the missed exam. Instructors reserve the right to deny makeup exams to student who make it a habit of missing class regularly, or habitually missing exams. **Missed unannounced quizzes may not be made up. Instead, the two lowest quiz scores are dropped.**

• **Extra Credit Policy:**
  Extra credit is not offered in this course. Adjustment to final grades will be made as follows: At the end of the term:
  1: The 5 lowest homework scores will be dropped.
  2: The two lowest quiz scores will be dropped.
  3: The Final exam will replace one unit exam score, as per the policy described above.

IV: **Grading:**

Final Letter grades are assigned as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>92.0-100</td>
</tr>
<tr>
<td>A-</td>
<td>90.0-91.9</td>
</tr>
<tr>
<td>B+</td>
<td>88.0-89.9</td>
</tr>
<tr>
<td>B</td>
<td>82.0-87.9</td>
</tr>
<tr>
<td>B-</td>
<td>80.0-81.9</td>
</tr>
<tr>
<td>C+</td>
<td>78.0-79.9</td>
</tr>
<tr>
<td>C</td>
<td>70.0-77.9</td>
</tr>
<tr>
<td>D</td>
<td>60.0-69.9</td>
</tr>
<tr>
<td>F</td>
<td>0-59.9</td>
</tr>
</tbody>
</table>

Keep all written work in case of a dispute.

Please note that the course coordinator does not override the instructor’s grading decisions. Grading scale is “as is” and rounding grades beyond what appears here does not occur.
V: Tentative Course Calendar

<table>
<thead>
<tr>
<th>Week Of</th>
<th>Topics</th>
<th>Homework Due</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 12th</td>
<td>Intro; 11.1-11.2</td>
<td>HW 1: Orientation (due 1/14 11:59pm), HW2</td>
<td>1/18</td>
</tr>
<tr>
<td>January 19th</td>
<td>11.2-11.3</td>
<td>HW 3, HW 4</td>
<td>1/25</td>
</tr>
<tr>
<td>January 26th</td>
<td>11.4-11.5</td>
<td>HW 5, HW 6</td>
<td>2/1</td>
</tr>
<tr>
<td>February 2nd</td>
<td>Unit 1 Review and Exam, 11.6</td>
<td>Unit 1 Review (due 2/5 11:59 pm)</td>
<td>2/8</td>
</tr>
<tr>
<td>February 9th</td>
<td>11.6-11.7</td>
<td>HW 7, HW 8</td>
<td>2/15</td>
</tr>
<tr>
<td>February 16th</td>
<td>11.8. 12.1</td>
<td>HW 9, HW 10</td>
<td>2/22</td>
</tr>
<tr>
<td>February 23rd</td>
<td>12.2-12.3</td>
<td>HW 11, HW 12</td>
<td>3/1</td>
</tr>
<tr>
<td>March 2nd</td>
<td>Unit 2 Review and Exam</td>
<td>Unit 2 Review (due 3/6 11:59 pm)</td>
<td></td>
</tr>
<tr>
<td>March 16th</td>
<td>13.1-13.3</td>
<td>HW 13, HW 14</td>
<td>3/22</td>
</tr>
<tr>
<td>March 23rd</td>
<td>13.3-13.5</td>
<td>HW 15, HW 16</td>
<td>3/29</td>
</tr>
<tr>
<td>March 30th</td>
<td>13.5-13.7</td>
<td>HW 17</td>
<td>4/5</td>
</tr>
<tr>
<td>April 6th</td>
<td>13.7 and Unit 3 Review</td>
<td>Unit 3 Review (due 4/14 11:59pm), HW 18</td>
<td>4/12</td>
</tr>
<tr>
<td>April 13th</td>
<td>Unit 3 Exam, 14.1-14.2</td>
<td>HW 19</td>
<td>4/19</td>
</tr>
<tr>
<td>April 20th</td>
<td>14.2-14.3</td>
<td>HW 20</td>
<td>4/26</td>
</tr>
<tr>
<td>April 27th</td>
<td>14.3, Final Exam Review</td>
<td>HW 21</td>
<td>5/3</td>
</tr>
<tr>
<td>May 4th</td>
<td>Comprehensive Final Exam</td>
<td>All Unit Reviews Due 5/7 11:59pm)</td>
<td></td>
</tr>
</tbody>
</table>

* (Homework is due at 11:59pm on the dates listed)
* Due Date for Unit Reviews and Orientation Assignment are noted separately
* All Dates are tentative and subject to change due to weather, accomplishment, progress, etc. In the event of closure due to weather, an exam is moved to the next scheduled class date.
* Testing Dates may vary for the section 501 course. Your instructor will advise to appropriate in-person testing formats, dates, and times.

VI: General Policies:

- **Class Conduct:**
  Class attendance and participation is essential for success in this course. Attendance is recorded and reported to the Starfish system and is reported to advisors. Come to class prepared. Be active in discussions and activities. Ask questions when you have them. Cell phones and other electronic devices not necessary for class should be turned off or rendered silent. Usage of electronic devices for non-class related items, such as texting, web surfing, facebook, messaging is not permitted and is grounds for removal from class. Serious disruptions are also grounds for removal. Please consult the student code of conduct: [http://www.csuohio.edu/studentlife/StudentCodeOfConduct.pdf](http://www.csuohio.edu/studentlife/StudentCodeOfConduct.pdf)
Other Important Dates to Remember:

The final day to drop any course without a “W”: January 23rd, 2015***
The last day to withdraw: March 27th, 2015
Martin Luther King Holiday: January 19th, 2015
President’s Day Holiday: February 16th, 2015
Spring Recess: March 8th – March 15th, 2015

***Note, for the purposes of financial aid, it is not recommended to wait until the withdrawal deadline to remove one’s self from a course, as a “W” may be considered equivalent to an “F” when determining eligibility. Please consult with your advisor for more information and do not wait to determine whether you are capable of completing this course as required.

Cheating and Plagiarism:
Cheating or plagiarism is not tolerated in any form, or for any assignment or exam. Students found violating this policy will be subject to university disciplinary action, including, but not limited to, a grade of 0 for that component of the course. Use of wireless-capable devices (phones, tablets, laptops, etc) during an exam is considered cheating, regardless of reason and results in an automatic 0 grade for that exam.

http://www.csuohio.edu/studentlife/StudentCodeOfConduct.pdf

Disabilities Statement:
Students with disabilities which may impact their ability to complete course requirements in this class may request appropriate accommodations by registering with the Office of Disability Services at (216) 687-2015 in Main Classroom 147 and discussing the nature of their situation. For further information check http://www.csuohio.edu/offices/disability

Technical Support Information for MyLabsPlus:
System Requirements:
Pearson 24/7 Technical Support
http://247pearsoned.custhelp.com/
If you encounter an instance when MyLabsPlus will not load, please choose a different browser and visit the System Requirements page. A Browser Check is available at the above link which will help determine what updates you must run for your browser to properly run MyLabsPlus. Note: CSU Math Department Faculty and Staff are not responsible for improperly configured browsers or systems without proper updates to operate MLP. Proper browser checking and updating on student’s personal computers is up to the student.

Note: MyLabsPlus will operate properly on tablets via HTML5. It is not optimized to operate on smartphones.
• **Course Topic List:**
  
  **Unit 1:** Limits, One-Sided Limits, Limits Involving Infinity, Rates of Change, Tangent Lines and Derivatives, Techniques for Finding Derivatives
  
  **Unit 2:** Derivatives of Products and Quotients, The Chain Rule, Derivatives of Exponential and Logarithmic Functions, Derivatives and Graphs, The Second Derivative, Optimization Applications
  
  **Unit 3:** Antiderivatives, Integration, Integration by Substitution, Area and the Definite Integral, The Fundamental Theorem of Calculus, Applications of Integrals, Differential Equations
  
  **Unit 4:** Functions of Several Variables, Partial Derivatives, Extrema of Functions of Several Variables, Saddle-Points
  
• **Disclaimer:**
  
  The course coordinator, in consultation with instructors, reserves the right to modify these procedures as the course progresses, and to change the assignment schedule from the given outline. Any changes will be announced in class in advance. Due date changes may be tracked in MyLabsPlus. You are responsible for being aware of changes to due dates and exam dates, or other changes in policy.