Marshall University Course Syllabus- Fall 2017 – MTH 140-Applied Calculus - Sec 106 online class

Important Notice:

- Course begins on online (Blackboard and MyMathLab) on **August 21** and ends on **December 14**. **MyMathLab is linked to Blackboard.**
- **All exams (except Practice Exams) will be proctored by a third party online proctoring software called "Respondus" (via a webcam on your own computer) or in person by the instructor in a campus computer lab. Details later in the syllabus.**
- **Students who are not able to use Respondus or cannot come to campus to take exams must inform the instructor in advance.**
- **Students will do homework on MyMathLab (linked to Blackboard): Students will buy a special version of the textbook (details later in the syllabus) that comes with an access code to MyMathLab.**
- **Students will take exams on Blackboard (MUOnline):**
- **There are eight exams (Respondus Exam (Syllabus quiz), three Practice Exams, three Exams, and the Final Exam), all on Blackboard.**
- **Homework counts for 30% of the grade. Exams count for 70% of the grade**

Course Title/Number	MTH 140 – Applied Calculus – Sec 106– CRN 3164 –(3 Cr)
Semester/Year	Fall 2017
Days/Time	Online class. No face-to-face meetings
Location	On the WEB at www.marshall.edu/muonline
Instructor	Dr. Ari Aluthge (Pronounced: A-luth-gay)
Office	Smith Hall 714
Phone	(304) 696 3050
E-Mail	aluthge@marshall.edu **(include your name and "MTH 140 – Online" in the subject line)** **Prefer to communicate on MUonline (Blackboard) with the "Internal Mail Box" tool.**
Office/Hours	Office hours by appointment only. No scheduled office hours.
University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to www.marshall.edu/academic-affairs and clicking on "Marshall University Policies." Or, you can access the policies directly by going to http://www.marshall.edu/academic-affairs/?page_id=802 Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment

Course Description From Catalog: A brief survey of calculus including both differentiation and integration with applications. Not to be substituted for Mathematics 229. PR: ACT Math 24 or MTH127 or MTH130. *3 hours*

Course Objectives:

- This course is intended for certain science and technology majors who wish to learn the rudiments of calculus.
- Theory is minimized and applications are emphasized.

Course Contents: Most of Chapters R through 4 and Sections 5.6 -5.7 & 6.1- 6.2

- Review of Algebra
- Limits and Differentiation
- Applications of differentiation
- Exponential and logarithmic functions
- Integration and applications
- Area and volume, and differential equations
- Functions of several variables (Partial Derivatives)

Learner Outcomes: The table below shows the following relationships: How each student learning outcomes will be practiced and assessed in the course. Upon completion of this course, students will have an understanding of the basic concepts of calculus. They will be able to apply these concepts to solve real world applications. In particular,

Course Student Learning Outcomes	**How students will practice each outcome in this Course**	**How achievement of each outcome will be assessed in this Course**
Students will employ quantitative and analytical methods to solve problems drawn from basic algebra and geometry.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams, and the final exam.
Students will verbally explain the meaning of limits, derivatives, and integrals in their own words and in the context of specific problems.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams, and the final exam.
Students will evaluate limits, derivatives, and integrals of algebraic, exponential, and logarithmic functions numerically, graphically, and symbolically.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams, and the final exam.

Students will apply the techniques of calculus to answer questions about the analytic geometry of functions, including tangent lines, local extrema, and absolute extrema.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams, and the final exam.
Students will interpret symbolic and numerical results in real-world terms, and analyze the validity of their results in a real-world setting.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams, and the final exam.
Students will apply techniques of calculus to solve applied problems from fields such as engineering and the sciences.	By reading and studying the textbook, lecture notes, PowerPoints presentations, watching and studying the Video clips available on MUonline.	Weekly homework assignments, unit exams, and the final exam.

Required Texts, Additional Reading, and Other Materials:

- A special three-hole-punched, loose-leaf version of the textbook, *Calculus and Its Applications, 11th Edition* (by Bittinger) that comes with an access code to MyMathLab. ISBN: 9780133862386.
- An alternative is to buy the Standalone access code to MyMathLab. ISBN: 9780321199911. **But it is highly recommended that students buy the book and the access code.**
- The book can be ordered online at The Marshall University Bookstore or directly from Pearson publishing at www.pearsonhighered.com. **(At MU Bookstore, the book with the access code costs $182 and it costs $166.67 from the publisher according to respective websites). The standalone access code costs $125.75 at MU Bookstore and $123.20 from the publisher.**
- **Caution: Please do not buy used books or any other version of the book without MML access code. You will still have to buy a new access code.**
- **Caution: Face-to-face MTH 140 classes on campus use a different textbook. Make sure to buy the correct textbook (with MML access code). Ask for Dr. Aluthge's online section 106.**

- **Recommended: A graphing calculator (will be allowed during tests and homework). Cell phones or any other electronic devices will not be allowed during exams in place of a calculator.**
- **There is a page containing links to several online guides (on calculators). See the "Online Calculator guides" icon on the "Course Info" page.**
- **There is also a page containing some links for online resources. See the "Online Resources" link on the "Course Info" page.**

Course Requirements / Due Dates:

1. Structure: Course is divided into three units as follows. Each unit is 5 weeks
   - Unit 1 = Chapters R and 1.
     This unit runs from August 21 to September 24.
   - Unit 2 = Chapters 2 and 3.
     This unit runs from September 25 to October 29.
   - Unit 3 = Chapter 4 and Section 5.6, 5.7, 6.1, and 6.2.
     This unit runs from October 30 to December 10.
   - **The comprehensive final exam is due by December 14.**

2. Homework: There is a homework assignment on MyMathLab at the end of each section of the textbook**. Homework site, MyMathLab, can be accessed from the "Homework(MyMathLab)" link on the left column of the homepage. Students will use their access code to register for MML.**
   - **There are 37 HWs. This means, on average, students must complete three to four HWs per week.**
   - Homework deadlines are posted on the "Semester Schedule" file from the "Course Info" link in the left column of the homepage.
   - **Theirs is an "Orientation HW" to help students learn how to enter answers including graphs and formulas. It counts for the grade.**
   - On MyMathLab, HW grades range from 25 to 55. But they will be divided by 10 before entering to Blackboard. So effective grades of HW will vary from 2.5 to 5.5. **The grade for Orientation HW is 1.2 points.**
   - More details about doing homework on MyMathLab can be found in the file "Homework on MyMathLab" from the "Course Info" link.

3. Exams: There are eight exams including the Respondus Exam (Syl Quiz), a Practice Exam and an Exam for each unit and a comprehensive Final Exam.

- All exams can be found in the "Exams" folder in the left column of the homepage of the course.

- Respondus Exam (Syllabus Quiz) contains 10 non-math questions about the course from the syllabus. So students must read the syllabus before raking the Respondus Exam. It must be taken using Respondus LockDown Browser and Monitor. **So students must download Respondus LockDown Browser first. They must have a built-in or external webcam (referred to as the monitor) on their computer. More details later.** The primary goal of the Respondus Exam is to help students become familiar with the test taking process using Respondus LockDown Browser and a webcam. **So it must be taken on your own computer.**
- Unit Exams: **At the end of each unit, there are two exams. They are Practice Exam 1 and Exam 1 (for Unit 1, etc.).**
- **For each unit, the Practice Exam and the Exam are similar. They are made from the same test bank. Contains 20 questions each.**
- Practice Exams' purpose is to help students prepare for Exams. They both count for the grade. **Allowed two attempts and is worth 2o points.**
- Students will take Practice Exams on their own computer at home **(no proctoring involved)**. After taking each Practice Exam, students must print out a copy of the exam they took (submitted) and study it (correct their mistakes) before taking the relevant Exam.
- **To print any Practice Exam (after you have taken the exam), go to "My Grades", click on the Practice Exam you took, and then click on the grade (score) for that exam. It will open the exam.**
- Exams: **After taking the Practice Exam, students will take the Exam for that Unit. It must be taken using Respondus LockDown Browser. If students it at home, they must also use a webcam (referred to as Respondus Monitor).** More details this process can be found in the file "Taking Exams at Home" from the "Course Info" link. **One attempt, 80 points.**
- But students can come to campus to take Exams in a computer lab. I will proctor the Exams in the lab. **More details this process can be found in the file "Taking Exams on Campus" from the "Course Info" link.**
- Comprehensive Final Exam: At the end of the semester, students will take a comprehensive final exam. It must be taken using Respondus LockDown Browser, similar to the Exams. **Twenty questions, one attempt, 50 points.**
- Due dates for all exams are in the file "Semester Schedule" from the "Course Info" link.

The Grading Policy:

1. Homework assignments (including the Orientation HW) are worth 155 points. HW grades (except Orientation HW) will vary from 2.5 to 5.5.
2. The Respondus Exam (Syllabus Quiz) is worth 5 points.

3. Each Practice Exam is worth 20 points.
4. Each Exam is worth 80 points.
5. Comprehensive Final Exam is worth 50 points.
6. Total Possible Points = **510 points (155+ 5 + 3*20 + 3*80 + 50)**

Letter Grades: A = 450 – 510, B = 400 – 449.9, C = 350 – 399.9, D = 300 – 349.9 & F = 0 – 299.9

Attendance Policy: There's NO attendance requirement for this class. This is a 100% online class. Students will learn material on their own. But if students have any questions, they must contact the instructor for help.

Technical Requirements:
Please click on the "Student Services" tab at the top of the MUonline homepage for all the information related to technical requirements and other student services.

Marshall University Computer HELP DESK PHONE NUMBERS:
(304) 696-3200 (Huntington, WV), (304) 746-1969 (Charleston, WV), (877) 689-8638 (Toll free)

Some Helpful Hints:

- **For each section, I have included the following in separate files in this order:**
  - Detailed lecture notes with hundreds of worked out problems.
  - A PowerPoint presentation.
  - A page containing a video link or playlist (for most sections) (If you have difficulty with videos, please contact me)
  - Solutions to exercise problems #3, 7, 11, etc.
- **I suggest the following approach:**
  - Read the syllabus and take the syllabus quiz using the Respondus LockDown Browser and Monitor (counts for 5 points towards the grade). So you need to download Respondus LockDown Browser first. Read the file "Taking Exams at Home". **Do this by September 10.**
  - Also, take the Orientation HW on MML to learn how to enter your answers including formulas and answers. Read the file Homework on MyMathLab to see how to access MyMathLab. **Do this by Sep 3.**
- **The course is divided in to three units. Each unit consists of several chapters.**
  - Begin reading the text for each section of the textbook.
  - Next read my lecture notes including worked out examples.
  - Then view the PowerPoint presentation.
  - Next go and view the video (if there is a video for that section)

- If you need to study more, check the **online resources** page from the "**Course Info**" page.
- Do the HW on MyMathLab for that section. **On average, there will be three to four HWs per week. Each HW will remain open for several weeks including a penalty period during which there will be 3% a day penalty on late work.**

▪ **Each unit contains several chapters and is five weeks long.**

- Finish your HW at least a few days before the five-week period ends.
- Take the Practice Exam for each unit by the end of **Wednesday of the fifth week**. Practice Exam consists of **20 multiple-choice questions** from that unit. It must be taken directly on Blackboard without Respondus (no proctoring involved). **You will be allowed two attempts and the best attempt will count.**
- After you have taken the Practice Exam (both attempts), **print out a copy of the exam and study it before taking the Exam for that unit**. **Both Practice Exam and the Exam for each unit are similar (made from the test bank)**. To print out a copy of the Practice Exam you took, click on "My Grades", then click on the grade for that Practice Exam and it will allow you to open the exam.
- After you have taken and studied (made corrections to) the Practice Exam, **take the Exam for that unit by the end of Sunday of the fifth week**. It must be taken on Respondus LockDown Browser using a webcam (referred to as Respondus Monitor).
- **If students do not want to use Respondus at home to take Exams, they can come to Smith 624 on MU campus from 1 PM to 4 PM on the last (fifth) Friday of each five-week period to take the Exam.**
- **If coming to campus is not an option, please contact me in advance.**

▪ **Getting Help From The Instructor**:

- If you need help, please do not hesitate to contact me.
- It is my job to help my students. But you have to ask for help.
- Contact me through "Internal Mail", or at aluthge@marshall.edu or (304) 696 3050. My office is Smith 714.

To access MyMathLab to do your homework:

Enter your Blackboard course:

1. Sign in to Blackboard and enter your Blackboard course.
2. Click on Homework (MyMathLab) link on the left column of the homepage.
   Next click on any Pearson course link (e.g. see below).

Get access to your Pearson course content:

1. **If you already have a Pearson account, enter your username and password to link accounts.**
   If you do not have a Pearson account, select "create" and follow instructions.

2. Select an access option:
   - **Enter the access code that came with your textbook or was purchased separately from the bookstore.**
   - **Buy access using a credit card or PayPal account.**
   - **If available, get temporary access by selecting the link near the bottom of the page.**

3. **From the "You're Done page", select Go to My Courses.**

Get your computer ready:

For the best experience, check the system requirements for your product at:
http://www.pearsonmylabandmastering.com/system-requirements/

Need help?

For help with MyLab & Modified Mastering with Blackboard, go to:
http://help.pearsoncmg.com/mylabmastering/bbi/student/en/index.html

• Using LockDown Browser and a webcam (Respondus Monitor) for Online Exams:

- This course requires the use of LockDown Browser for taking online exams.
- The computer used for taking exams must also have a built-in or external webcam.
- The LockDown Browser software prevents a user from accessing other applications or going to other websites during an exam.

- The webcam (sometimes called Respondus Monitor) records you during the exam to ensure you're only using resources that are permitted.
- Together, these tools make it possible for students to take online exams from any location, and at times that are convenient.
- It also creates a fair testing environment for everyone in the course.
- **Watch the following video for more information:** Overview for Students (video)
- You will need to download and install LockDown Browser to your computer and use it to take tests (instead of using your normal browser.) The download URL is: http://www.respondus.com/lockdown/installinfo.pl?ID=323615594 See the video under "Additional Resources" below for instructions for downloading.
- **Caution: Don't download a copy of LockDown Browser from elsewhere on the Internet; those versions won't work for Marshall University.**
- **Review this list before taking an exam with LockDown Browser and Respondus Monitor:**
  - Ensure you are in a location where you won't be interrupted
  - Turn off all mobile devices, phones, etc.
  - Clear your desk of all external materials – books, papers, other computers, or devices
  - No one else should be in the room with you
  - Remain at your desk or workstation for the duration of the test
  - Start LockDown Browser. Select the **first option** "Blackboard Learn Production" from the dropdown menu. It will take you to Blackboard (MUonline) page. Log onto MUonline. Then select this course and the Exam you are taking. Click "BEGIN". Then select the **first option** (**Taking the exam using a webcam**). Then follow the instructions. **The second option is if you are taking the exam in a lab.**
  - If an interruption occurs during the exam, explain what happened by speaking directly to your webcam
  - You cannot exit the exam until all questions are completed and submitted for grading.
  - **Respondus Exam (Syllabus Quiz):**

    Please take the "MTH 140 Respondus Exam (syllabus quiz)" to become familiar with test taking process before taking Pre-Exam 1 and Exam 1. It contains 10 questions about the course from the syllabus. **Do this by September 10.**

- **Additional Resources:**
  - (pdf) Student Quick Start Guides

(video) How to Download & Use LockDown Browser

Campus Computer Lab Schedule For Exams:

If a student wants to take a test in a campus lab, he/she can do by coming to a campus computer lab.. See below for the schedule. Please come early so that you will have enough time to finish the exam. Bring your ID, textbook, and calculator. Most students take exams at home.

Exam	Lab	Date	Time
Exam 1	Smith Hall 624	Friday, September 22	1 PM – 4 PM
Exam 2	Smith Hall 624	Friday, October 27	1 PM – 4 PM
Exam 3	Smith Hall 624	Friday, December 8	1 PM – 4 PM
Final Exam	Smith Hall 624	**Wednesday, December 13**	1 PM – 4 PM

Notes:

- **Practice Exams are taken at home without Respondus, directly on Blackboard, no proctoring involved.**

If coming to campus is not an option, please contact me in advance.

2017 Fall Semester Schedule – MTH 140 (for Homework on MyMathLab and Exams on Blackboard)

Homework or Exam	Open at **12:00 AM** on	Regular Due: by **11:59 PM** on Earn **100%** of possible points on HW	Close (late due HW) at **11:59 PM** on (HW) **3%** a day penalty during late period.
Orientation HW	Saturday, August 19, 2017	Sunday, September 3, 2017	Sunday, September10, 2017
Respondus Exam & Syllabus quiz	Take the MTH 122 Respondus Exam to become familiar with test taking using **Respondus** by **September 17, 11:59 PM.** It contains 10 non-math questions related to the course from the syllabus. **Counts for grade (5 points).**		
Unit 1 (Chapters 1, 2 & 3) work starts here.			
HW R.1	Saturday, August 19, 2017	Sunday, September 3, 2017	Sunday, September10, 2017
HW R.2	Saturday, August 19, 2017	Sunday, September 3, 2017	Sunday, September10, 2017
HW R.3	Saturday, August 19, 2017	Sunday, September 3, 2017	Sunday, September10, 2017
HW R.4	Saturday, August 19, 2017	Sunday, September 3, 2017	Sunday, September10, 2017
HW R.5	Saturday, August 26, 2017	Sunday, September 10, 2017	Sunday, September 17, 2017
HW R.6	Saturday, August 26, 2017	Sunday, September 10, 2017	Sunday, September 17, 2017
HW 1.1	Saturday, August 26, 2017	Sunday, September 10, 2017	Sunday, September 17, 2017
HW 1.2	Saturday, August 26, 2017	Sunday, September 10, 2017	Sunday, September 17, 2017
HW 1.3	Saturday, August 26, 2017	Sunday, September 10, 2017	Sunday, September 17, 2017
HW 1.4	Saturday, September 2, 2017	Sunday, September 17, 2017	Sunday, September 24, 2017
HW 1.5	Saturday, September 2, 2017	Sunday, September 17, 2017	Sunday, September 24, 2017
HW 1.6	Saturday, September 2, 2017	Sunday, September 17, 2017	Sunday, September 24, 2017
HW 1.7	Saturday, September 2, 2017	Sunday, September 17, 2017	Sunday, September 24, 2017
HW 1.8	Saturday, September 2, 2017	Sunday, September 17, 2017	Sunday, September 24, 2017
Practice Exam 1	Opens, Sep 2 **Closes Sep 20**	**Take at home directly on Blackboard by Sep 20. Good practice for (real) Exam 1. 20 points.**	
Exam 1	Opens, Sep 2 **Closes Sep 24**	**Take via Respondus at home by Sep 24 or come to Smith 624 on Sep 22 , 1 – 4 PM. 80 points**	
Unit 1 work ends here. And Unit 2 (Chapters 4 & 5) starts here.			
HW 2.1	Saturday, September 9, 2017	Sunday, October 1, 2017	Sunday, October 8, 2017
HW 2.2	Saturday, September 9, 2017	Sunday, October 1, 2017	Sunday, October 8, 2017
HW 2.3	Saturday, September 9, 2017	Sunday, October 1, 2017	Sunday, October 8, 2017
HW 2.4	Saturday, September 16, 2017	Sunday, October 8, 2017	Sunday, October 15, 2017
HW 2.5	Saturday, September 16, 2017	Sunday, October 8, 2017	Sunday, October 15, 2017
HW 2.6	Saturday, September 16, 2017	Sunday, October 8, 2017	Sunday, October 15, 2017
HW 2.7	Saturday, September 23, 2017	Sunday, October 15, 2017	Sunday, October 22, 2017
HW 3.1	Saturday, September 23, 2017	Sunday, October 15, 2017	Sunday, October 22, 2017
HW 3.2	Saturday, September 23, 2017	Sunday, October 15, 2017	Sunday, October 22, 2017
HW 3.3	Saturday, September 30, 2017	Sunday, October 22, 2017	Sunday, October 29, 2017
HW 3.4	Saturday, September 30, 2017	Sunday, October 22, 2017	Sunday, October 29, 2017
HW 3.5	Saturday, September 30, 2017	Sunday, October 22, 2017	Sunday, October 29, 2017
Practice Exam 2	Opens Sep 30 **Closes Oct 25**	**Take at home directly on Blackboard by Oct 25. Good practice for (real) Exam 2. 20 points.**	
Exam 2	Opens Sep 30 **Closes Oct 29**	**Take via Respondus at home by Oct 29 or come to Smith 624 on Oct 27, 1 – 4 PM. 80 points**	
Unit 2 work ends here. And Unit 3 (Chapters 6, 7 & 8) starts here.			
HW 4.1	Saturday, October 7, 2017	Sunday, November 05, 2017	Sunday, November 12, 2017
HW 4.2	Saturday, October 7, 2017	Sunday, November 05, 2017	Sunday, November 12, 2017
HW 4.3	Saturday, October 7, 2017	Sunday, November 05, 2017	Sunday, November 12, 2017
HW 4.4	Saturday, October 14, 2017	Sunday, November 12, 2017	Sunday, November 19, 2017
HW 4.5	Saturday, October 14, 2017	Sunday, November 12, 2017	Sunday, November 19, 2017
HW 4.6	Saturday, October 14, 2017	Sunday, November 12, 2017	Sunday, November 19, 2017
HW 4.7	Saturday, October 21, 2017	Sunday, November 26, 2017	Sunday, December 3, 2017
HW 5.6	Saturday, October 21, 2017	Sunday, November 26, 2017	Sunday, December 3, 2017
HW 5.7	Saturday, October 21, 2017	Sunday, November 26, 2017	Sunday, December 3, 2017
HW 6.1	Saturday, October 28, 2017	Sunday, December 3, 2017	Sunday, December 10, 2017
HW 6.2	Saturday, October 28, 2017	Sunday, December 3, 2017	Sunday, December 10, 2017
Practice Exam 3	Opens Oct 28 **Closes Dec 6**	**Take at home directly on Blackboard by Dec 6. Good practice for (real) Exam 3. 20 points.**	
Exam 3	Opens Oct 28 **Closes Dec 10**	**Take via Respondus at home by Dec 10 or come to Smith 624 on Dec 8, 1 – 4 PM. 80 points**	
Final Exam	Opens Oct 28 **Closes Dec 14**	**Take via Respondus at home by Dec 14 or come to Smith 624 on Dec 13, 1 – 4 PM. 50 points**	
Please print and post this schedule near your desk or download it to your smart phone or laptop or desktop.			