

MA 140 Calculus with Analytic Geometry I Syllabus Summer 2016

MA 140, Section 602 Calculus with Analytic Geometry I (M – F 9:00 – 10:45 a.m.) 165N Nick

Instructor: Peter Olszewski

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Office Hours: M – F: 11:00 a.m. – 12:00 p.m. Other office hours by appointment.

Text: *Calculus of a Single Variable, Early Transcendental Functions*, Sixth Edition, Larson, Edwards, Brooks/Cole, Cengage Learning, 2015.

Topics: Selected from Chapters 1 – 6. See under comments, “description.”

Technology: A graphing calculator (TI-83 or 84) is required for computations and graphical displays during classes, exams, quizzes, and homework but NOT a cell phone calculator and NOT the TI-89, 92.

Grading:

1. (100) **11 Quizzes/Homework Assignments**---10 points each. These will either be in-class quizzes, group quizzes or homework assignments. **Homework assignments will not be accepted late.** An announcement of an in-class quiz will be made during the preceding class. Each in-class quiz will typically consist of a few of the recent homework problems and/or problems similar to homework problems. Making up a new quiz for a student who has missed an in-class quiz is not one of my favorite activities. However, it MAY be possible to take an in-class quiz you missed, if you make arrangements with me to take it before it is returned to the rest of the class. *Your lowest quiz/homework assignment score will be dropped.*
2. (300) **3 Exams**---100 points each. Scheduled:
 - I. Wednesday, July 13, 2016
 - II. Wednesday, July 27, 2016
 - III. Monday, August 8, 2016

These dates may be changed by an announcement in class at least one week in advance. **Unless there is a very serious reason for your absence on the day of an exam, a grade of zero will be earned for the missed work. If it is necessary for you to be absent from an exam, please try to see me a few days in advance in order to make other arrangements.**

WARNING: *Quizzes and exams will be challenging. Do not leave your preparation for them until the last minute!*

3. **Final Exam**---150 points—**Comprehensive Final Exam.**

Scheduled: Friday, August 12, 2016 in 165N Nick, 9:00 a.m. – 10:50 a.m.

Review Day: Thursday, August 11, 2016 in 165N Nick, 9:00 a.m. – 10:45 a.m.

4. The grade you earn will be calculated via:

Your total points in 1. + 2. + 3. = _____ % ≥ 93 -- A; 90-92 -- A-; 87-89 -- B+; 83-86 -- B;
550 80-82 -- B-; 77-79 -- C+; 70-76 -- C; 60-69 -- D; 0-59 -- F

Comments:

1. This class runs from Wednesday, June 29, 2016 – Wednesday, August 10, 2016.

2. **Description:** Functions, limits; analytic geometry; derivatives, differentials, applications; integrals, applications. Sections: 1.5-1.6, 2.1-2.5, 3.1-3.7, 4.1-4.8, 5.1-5.5, 5.7-5.9, and, if time permits, 6.2-6.3.

3. **Keep Current:** Have a routine so that soon after class and before your next Calculus with Analytic Geometry I class, you have re-read whatever notes you took in class, read the appropriate sections from your text, and have attempted the assigned problems. Suggested problems will be assigned during most classes.

Note: The ideal situation is to pre-read the material before it is discussed in class.

4. Classes: Class time will usually be devoted to lectures and practice; analyzing and understanding concepts, definitions, analyzing and understanding problems, solving problems, and going over homework. We will usually begin each class by answering questions students have on the homework assigned during the previous class. I look forward to significant class participation.

5. Homework: Every student is expected to attempt all homework problems. Suggested homework problems will be assigned each class. It is to your benefit to work through problems. See page 3 for suggested exercises from the text.

6. Class Participation:

- a. Come to class. You **MUST** attend all classes unless you have i. a family emergency, ii. personal sickness, or iii. a **DOCUMENTED** Penn State team sporting event. Note: Although attendance will not be taken, it is important for you to attend ALL classes and participate.
- b. Be on time or if you are late for some reason come into the room QUIETLY.
- c. Treat all classmates and me with respect.
- d. Actively participate in class discussions, group work, and board work.

7. Difficulties with the Concepts and/or Problems: Students are encouraged to do one or all of the following: a. try again; b. talk to fellow classmates about it; c. come to see me; d. email me; e. come to your next Calculus with Analytic Geometry I class prepared to ask questions; f. get tutoring from the math lab, located on the second floor of Roche Hall. For more information go to: <http://psbehrend.psu.edu/Academics/academic-services/lrc/tutoring>.

8. The Text: The text is necessary to use during homework. Sometimes, the text will not be needed for class and/or homework. However, it is probably the main source of information along with class notes. Other math texts are available in the library.

9. Notebook & Other Materials: All students must maintain a notebook. A three-ring binder with plenty of loose leaf paper OR a notebook and an empty three ring binder for handouts that I have already hole punched to help keep you organized are required. Students also must have pen(s) or pencil(s), and a calculator. The notebook should contain notes students take during class, the notes students make while reading the text, solutions to homework problems, handouts from class, quizzes, and exams. Students' notebook and text should be the basis for learning mathematical concepts.

10. Cell Phones, Ipods, and all similar electronic devices should be turned off and stored out of sight during all classes and assessments. I find it to be extremely rude and disrespectful to be texting and checking your phone during class. I reserve the right to lower your grade (-5 points for each offense) if I catch you texting and using your phone or ipod or any other of these devices during class.

11. Academic Honesty: Acts of dishonesty are unacceptable behavior. Homework is considered to be an informal evaluation. Therefore, you are encouraged to work with others on homework assignments. Exams and quizzes are considered formal evaluations of students' knowledge and understanding of content learned in a given unit. Therefore, students are not permitted to work with anyone else when involved in a formal evaluation. I expect students to sign their names only to work they have done without outside help on formal assignments. See your Penn State Behrend catalogue for the definition and policies on dishonesty. For more information, go to: <http://psbehrend.psu.edu/intranet/faculty-resources/academic-integrity/academic-integrity>.

12. Accommodations for Student with Disabilities: Please come to see me in private about any special accommodations you may need. You **MUST** have proper Penn State Student Services documentation before I can provide any accommodations.

13. Summer School Class: This will be a fast-paced class. Be sure to be present for ALL classes. Should you miss any classes, don't wait to get the notes from another classmate. Get them ASAP and review what you missed via my webpage. You may also come to see me for extra help any time.

NOTE: This syllabus is not set in stone. It can be changed due to campus cancellations, speed at which we go through material, amount of office hours, and the amount of homework assignments, quizzes, and exams.

Suggested (non-graded) Exercises from Text

- 1.5: 1-15 odd, 23-33 odd, 45, 55, 57, 59-69 odd, 71-81 odd, 87-119 odd, and 135.
1.6: 1-43 every other odd, 51-55 odd, 61-71 odd, and 89-109 odd.
2.1: Look at the pretty pictures of pages 63-64. Problems 7 and 9.
2.2: 1-29 odd and 51.
2.3: 1-43 odd, 45-65 odd, 67-79 odd, 91, 95, 97, 99, 107, 109, and 121-125 odd.
2.4: 1-5 odd, 7-67 every other odd, 69, 71, 77-83 odd, 89, 91, 99, 101, and 107-111 odd.
2.5: 1-53 every other odd.
3.1: 1-23 odd, 33-37 odd, 47, 53, 55, 67, 75-79 odd, 85-89 odd, 93, and 95.
3.2: 1-63 every other odd and 87-101 odd.
3.3: 1-57 every other odd, 63, 65, 79, 81, 97-113 odd, 119, 121, 127, and 137-141 odd.

Exam I covers sections 1.5-1.6, 2.1-2.5, 3.1-3.3

- 3.4: 1-33 odd, 47-111 every other odd, 125-151 odd, 159, 161, 191, and 193.
3.5: 1-19 odd, 33-49a odd, 53-57 odd, and 63-75 odd.
3.6: 1-13 odd and 19-53 odd.
3.7: 3, 7, 11-29 odd, and 37.
4.1: 1-19 odd and 21-43 odd.
4.2: 11, 15, 17, 41, 47, 49, 51, 65, and 67.
4.3: 21-63 odd and 75-79 odd.
4.4: 1-57 every other odd, 69, and 71.
4.5: 13-41 every other odd, 47, 49, 63, 65, and 73.
4.6: 3, 9 (find slant asymptote), 11, 13, and 17.
4.7: 17, 19, 21, 29, and 39.
4.8: 1-23 odd, 29, 31, and 33.

Exam II covers sections 3.4-3.7, 4.1-4.8

- 5.1: 1-41 odd, 51, 53, 55, and 57.
5.2: 1-19 odd, 21-35 odd, 37-41 odd, and 45-53 odd.
5.3: 1-47 odd, 49-55 odd, and 63-73 odd.
5.4: 1-47 odd, 49-59 odd, 71-75 odd, 79-97 odd, 101-109 odd, and 117-119 odd.
5.5: 1-25 odd and 33-91 every other odd.
5.7: 1-41 odd, 51-57 odd, 73, and 75.
5.8: 1-45 odd.

Exam III covers sections 5.1-5.5, 5.7-5.8

- 5.9: 1-31 odd, 43-59 odd, 65-81 odd, 85, 91, and 93.
6.3: 15-23 odd.

Final Exam covers all sections listed above.