Course: Advanced Placement Calculus (AB)   **School Year**: 2018-2019

Instructor: Mr. Daniel Lemay   **School Phone**: 802-222-5214 ext 202

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Twitter: @danlemaypi   **Course hash tag**: #oxbowcalc

Credit: 1   Full Year Course

Oxbow Mission Statement: We are a family of empathetic, inquisitive, and socially responsible learners affecting our world.

Course Introduction: This course is designed to prepare students for the Advanced Placement Calculus AB exam which is given each year in May. It consists of the following parts: **Differential Calculus** - Topics included in this course are rates of change, limits and continuity, derivatives and applications of derivatives. **Integral Calculus** - This course is a continuation of differential calculus. Topics included in this course are definite integrals, differential equations, mathematical modeling, and applications of definite integrals.

Learning Outcomes: To introduce students to the major concepts of a first-semester college calculus course, with the overall objective of preparing the student for the Advanced Placement exam on May 14, 2019.

Course Expectations: To be successful you will be able to solve a variety of problems and make connections between the mathematics and the situations presented. You will express mathematical concepts, results, and problems graphically, numerically, analytically, and verbally. Making connections among these representations is also important. You will demonstrate the ability to work both independently and cooperatively as part of a team. I expect work to be completed and submitted according to deadlines.

Student Expectations: Students will be asked to be active participants in class valuing both their own contributions as well as the contributions of others. Students will arrive in class on time, prepared to work, with a pencil, notebook, textbook and calculator. Students will be expected to take notes on topics that can assist with their independent work. All assignments, independent or in class, will require supporting work be shown. No late assignments will be credited. Make-up work is to be completed within a time frame comparable to the length of a student's absence. Modifications to this expectation may be made on an individual basis. Students will be provided with a weekly assignment sheet that will allow them to remain up-to-date with the class process in spite of absence.

What to do if you are absent: Make-up work is expected to be completed within a time frame comparable to length of student's absence. Modifications to this expectation may be made on an individual basis.

When can you get outside of class help? Getting help earlier is better than later. We are trying to keep Wednesday and Thursday afternoons open for Help sessions. Also refer to https://goo.gl/bvKeDz

Parents/Guardians: Some things you can do to help your child meet the goals above are to:

- Check to verify homework/projects are completed. I usually have my weekly assignment guides available on the web at http://www.danlemay.net. Click on the appropriate course link
- Do not hesitate to email/call me if you have any questions or concerns.
- I am almost always available for outside help after school. Sooner is better than later. Troubles in mathematics snowball fast.
- PLEASE check grades online at least once per week. http://oxbowhs.org/>MMS

Methods of Evaluation*:*

Various points will be awarded for various assignments such as homework, presentations and quizzes/tests.

There are two types of assignments: Formative assessments such as HW (both paper based and online), problem sets, presentations etc. These formative assessments are worth 25% of your marking period grade. Summative assessments are quizzes/tests and other activities that I deem to be summative in nature. These are worth 75% of your grade.

A running total of points earned and points possible will be kept in each category. A percentage will be calculated by dividing the points earned by the points possible at each midterm and at the end of the marking period. Letter grades will be assigned as outlined in Oxbow's Handbook for Students and Parent

No extra credit work is available for this course.

Semester grades: **Each marking period grade gets doubled**   **80%**

          Comprehensive exam   **20%**

Cheating and Plagiarism: Academic dishonesty such as cheating, willful plagiarism or misrepresentation in any way of one's work or the ideas, arguments, facts or phraseology of another will not be tolerated. One's quotation, or unacknowledged paraphrasing of another's sentences, phrases, key works, of someone else's ideas or arguments is plagiarism. Please refer to the Student Handbook regarding disciplinary action. *Note every quiz, exam, problem set online HW set needs to have the following honor pledge:*

"I have neither given nor received unauthorized aid on this assignment" along with your signature and printed name

Resources used: Calculus, Graphical, Numerical Algebraic, by Finney, Demana, Waits, and Kennedy (2007); Addison-Wesley. Other outside materials as deemed appropriate. (Note: as per school policy, textbook must kept covered).

Website: http://mathxlforschool.com Registration details will be outlined in class.

Required materials list:
      A three-ring binder just for math, pencil or a black/blue pen., a TI-83 or TI-84 series graphing calculator.

This course may be taking for college credit through White Mountain Community College and NH Running Start program. (Cost:$150 paid to WMCC. This earns a 4-credit course which is transferable) For more information see http://www.wmcc.edu/academics/running-start-program or call Lomond Richardson or Dan Lemay at Oxbow 802.222.5214

Please detach, sign and return this page:

Advanced Placement Calculus (AB)

Mr. Lemay

The signatures affixed below indicate that this course syllabus has been read and its contents understood. It is further recognized that the material outlined above is accurate and will be adhered to as closely as possible. Circumstances beyond the control of the teacher and/or administration may dictate the need for additions, deletions, or alterations to the content of this syllabus.

Student Name (*please print*)_____

Student Signature: _____

Date: _____

Parent Signature: _____

Date: _____

Due signed and returned on or before Tuesday 9/4/2018