Calendar for 19A, Winter 2018; post-Midterm:

week 5:

QUIZ: from 4.2.

M Feb 5. Midterm discussion. 4.2: Mininimizing and maximizing. Some 4.7. Some 2nd derivative test.

W Feb 7 : (WebAssign HW due from 4.2.) (local max, min, endpoints) . 4.4: 2nd derivative test for a local min or max. (p. 218). 2nd order Taylor appoximation

Fri Feb 9 : (WebAssign HW from 4.7). 4.7, "Applied optimization" .

week 6:

QUIZ: from 4.7

Feb 12: (WebAssign from 4.6.). 4.6 Graphing and qualitative behaviour.

Feb 14: (WebAssign from ?? .). Theorems: Mean value (4.3); the speedometer/odometer reality check. Intermediate value (2.8).

Feb 16. (WebAssign from 4.8.) 4.8: Newton's method. Compare with bisection method.

week 7:

M Feb 19: HOLIDAY. President's Day.

QUIZ: from 4.6

W Feb 21. 3.8: Implicit differentiation. Curves by eqns and parameterized.

Fri. Feb 23 : 5.1-5.2. Archimedes. The problem of area. Summation notation. Peeks at integration. Statements of fund thm of calculus.

week 8:

QUIZ: 3.8.

M Feb 26 5.1- 5.4. Some simple sums, infinite and non-infinite.

W Feb 28. 5.1- 5.4. anti-derivatives. integration. restatements of fund thm of calculus.

Fr Mar 9. L'Hôpital's rule and quotients of Taylor expansions: 4.5, 8.4, 10.7

week 9 :

Quiz: geometric sums or series. See esp. 10.2; :p. 526-7.; see also 5.1 ; OR : L'Hôpital

M Mar 5: ch. 2. Continuity and limits , 1 . The real number line. Eudoxus. The golden mean. $\sqrt{2}$.

W Mar 7 ch. 2: Continuity and limits, 2.

Fr Mar 9. Kepler's law and Newton's eqns ,13.6. [Pollard?] OR back to $e^{i\theta}$.

week 10:

Quiz: ch. 2. limits or continuity.

M Mar 12. Last full lecture.

W Mar 14. Review 1.

Fri Mar 16: Review 2.

week 11: Finals week.

Wednesday, March 21 12:00 to 3:00 p.m. **Final.**