The exam is scheduled for Friday 2 December. Calculators are not permitted, and are not needed.

The exam covers Sections 11.6 through 11.10. There are 10 problems.

To study for the exam, work problems. Do the quiz problems over again. Do appropriate problems at the end of the chapter.

Here is a list of topics that you need to know:

1. Identify if a series is absolutely convergent, conditionally convergent or divergent using the tests from sections 11.2 through 11.6.

2. Find the interval of convergence of a power series, which includes checking the endpoints.

3. Use a template (given on the exam) to write the first 4 nonzero terms of the series expansion for a function related to the template. Possible templates are for $\frac{1}{1-y}$, $\frac{1}{(1-y)^2}$, $\ln(1+y)$, $\arctan(y)$, $e^y$, $\sin y$, $\cos y$.

4. Use the Taylor series formulation (direct computation of $c_n$) to write the series expansion for a function, including sigma notation and the first 4 nonzero terms.

5. Use the binomial series formula to write the first 4 nonzero terms of the series expansion for a function of the form $(1+y)^k$. 