

# Expectation checklist

## - Module 13

**At the completion of this module, you should:**

- Be able to find the general solution for 2nd-order homogeneous linear differential equations with constant coefficients such that the nonhomogeneous term consists of:
  - a polynomial of degree  $k$ ;
  - a sum of  $\sin(x)$  and/or  $\cos(x)$ ;
  - of the form  $x^k e^{mx}$ ; or
  - a combination of the above terms.

**Coming up next, we:**

- Solve some nonhomogeneous linear differential equations of a different form, and with a different method, than those seen here.