

# Incubation & Embryology

## PROGRAM OVERVIEW

What is more fascinating than seeing a fully developed baby chick emerge from an egg?

Just three weeks of incubation transforms a seemingly lifeless chicken egg into an active, living being. This hands-on project through the University of Illinois (U of I) Extension's 4-H program is designed to give your students the opportunity to hatch chicks in their own classroom. During the 21-day incubation period, students learn to prepare eggs, set up an incubator, record progress, turn eggs, and test eggs for fertility. The project aligns with both Next Generation Science Standards (NGSS) and Common Core Standards. The program is designed for youth in grades K to 5, but can be adapted for older youth.

**4-H** provides training, resources, classroom curriculum, and egg ordering services so that educators can bring embryology to their classrooms.

**TEACHERS** attend training, provide program equipment and supplies for their classroom, teach and oversee the program for their students, and provide participant information and program evaluation data to the 4-H program.

STUDENTS learn about embryology and get to see the wonder of a chick hatching from an egg. The program is designed to align with learning standards to help youth build knowledge and skills. Targeted skills include: critical thinking, prediction, modeling/graphing, observation, organization, comparison, communication, teamwork, sharing, record keeping and responsibility.

#### **PROGRAM TIMELINE**

- Interest form available (March-December)
- Registration for classes and egg orders opens (December)
- Class registrations due (Mid-February)
- Egg orders due (Late-February)
- Beginner and Advanced Teacher Trainings held (Early March)
- Teachers turn in group enrollment forms with participant info (Late March)
- Egg order pick ups (Early April)
- Incubation & hatching over 21 days in classrooms (April)
- Teachers evalate progam & send data to U of I staff (Late April-Early May)

## Learn more at: go.illinois.edu/embryology4Hdkk





#### **PARTICIPATION COST ESTIMATES\***

We provide some cost estimates below to help you budget for the program. \*Please note, these are estimates only and final pricing info for egg orders and teacher trainings will be released when registration opens each winter. Teachers are required to provide all of the supplies that are needed to hatch eggs.

- Egg orders (\$12 per dozen\*. 2 dozen minimum order. Includes chick feed.)
- Teacher trainings (\$60 Beginner includes 24 eggs; \$30 Advanced includes 24 eggs)
- Supplies (include but are not limited to the following)
  - Incubator with built-in egg turner (\$150)
  - Thermometer (\$70)
  - Brooder box (\$25)
  - Egg candler (\$20)
  - Heat lamp (\$7)
  - Chick waterer (\$5)
  - Chick feeder (\$3)

Other items with nominal costs that may be needed include: pencil, bleach, thermostat wafer, turkey/meat baster, marbles, wet sponges, chicken wire, cheese cloth wipes, and brooder bedding (pinewood/cedar shavings).

Teachers who attend the Beginner Teacher Training will get additional information about program supplies, approximately one month before eggs are delivered.

Looking for more information? Contact staff in your county's office with questions. See list at right for details.

**Interested in participating?** Fill out the interest form on our website and you'll be added to our Embryology & Incubation e-mail list and will be reminded when program registration opens and closes.

Does your school have financial need? If your student population is 50% or more free and reduced lunch, U of I Extension may be able to help cover some supply costs. Contact Amy Henschen to learn more at amylh@illinois.edu.





#### **Contact Info**

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