

Mission and Learning Outcomes

DNAS

Fall, 2005

Listed below are the mission and learning outcomes for DNAS, the EVS program and the Biology program.

DNAS:

The mission of the Department of Natural and Applied Sciences is 1) to provide students with a broad-based contemporary program of study, which will provide them with the necessary technical and intellectual skill sets needed to work as an scientific professional in the 21st century, 2) to develop scientific and mathematical competency for students pursuing science education, and 3) to meet the needs of all students at the University of Dubuque for quantitative skills, scientific literacy, and an understanding of scientific processes.

DNAS Goals/Learning Outcomes:

(For courses, see the listings for EVS and Biology plus those following.) Students should be able to do the following:

1. Identify and analyze significant scientific issues of local and global concern.
UDCM 110, 119
2. Appreciate ecological diversity.
3. Contribute significantly to multidisciplinary teams for which science is one of the components.
Phy 115, 151, 152
UDCM 110, 111, 112, 119, 231, 232, 235, 333
4. Communicate well according to professional standards of their chosen field.
5. Utilize measurements and observations in their chosen field.
UDMA 115, 250
UDCM 110, 111, 112, 119, 231, 232, 235, 333
6. Evaluate the ethics of behavior and decisions likely to be encountered in one's professional career.
All courses
7. Embrace lifelong learning
All courses

EVS:

The mission of the Environmental Science program is to provide students with a broad-based contemporary program of study, which will provide them with the necessary technical and intellectual skill sets needed to work as an environmental professional in the 21st century.

Environmental Science Degree Program Learning Outcomes:

Students should be able to do the following:

1. Identify and analyze significant environmental issues of local and global concern.

ESC 115

EVS 105, 248, 256, 375, 495

2. Appreciate ecological diversity.

EVS 245, 340, 414, and 476

3. Contribute significantly to multidisciplinary teams researching environmental problems.

ESC 115

EVS 333, 375, 380

4. Gather and perform quantitative analysis of environmental data using current technology.

ESC 115

EVS 230, 247, 248, 333, 375, 491, 492

5. Communicate results according to professional standards in the form of reports, maps, graphics, and presentations.

EVS 248, 375, 495, 491, 492

6. Evaluate the ethics of behavior and decisions likely to be encountered in one's professional career.

All EVS

7. Embrace lifelong learning

All EVS

Biology:

The mission of the Biology program is to provide students with a broad-based contemporary program of study, which will provide them with the necessary technical and intellectual skill sets needed to work as an biological professional in the 21st century.

Biology Degree Program Learning Outcomes:

Students should be able to do the following:

1. Identify and analyze significant biological issues of local and global concern.
2. Appreciate ecological diversity.
3. Contribute significantly to multidisciplinary teams researching biological problems.
4. Gather and perform quantitative analysis of biological data using current technology.
5. Communicate results according to professional standards in the form of reports, maps, graphics, and presentations.
6. Evaluate the ethics of behavior and decisions likely to be encountered in one's professional career.
7. Embrace lifelong learning