

# Academic Year 2012 - 2013

21250 Stevens Creek Blvd. Cupertino, CA 95014 408-864-5678 www.deanza.edu

Please visit the Counseling Center to apply for certificates and degrees, and for academic planning assistance.

#### Certificate of Achievement Level Requirements

A minimum "C" grade in each major course. Note: A maximum of six (6) quarter units may be transferred from other academic institutions.

### Certificate of Achievement-Advanced Level Requirements

- I. A minimum "C" grade in each major course.
- Demonstrated proficiency in English and mathematics as evidenced by eligibility for EWRT IA or ESL 5 and eligibility for MATH 114.

Note: A maximum of 18 guarter units may be transferred from other academic institutions.

#### A.A./A.S. Degree Requirements

- I. Completion of all General Education (GE) requirements (31-42 quarter units) for the A.A./A.S. degree. GE units must be completed with a minimum 2.0 GPA ("C" average).
- 2. Completion of all major requirements. Each major course must be completed with a minimum "C" grade. Major courses can also be used to satisfy GE requirements (except for Liberal Arts degrees). Note: A maximum of 22 quarter units from other academic institutions may be applied toward the major.
- Completion of a minimum of 90 degree-applicable quarter units (GE and major units included). All De Anza courses must be completed with a minimum 2.0 GPA ("C" average). All De Ánza courses combined with courses transferred from other academic institutions must be completed with a minimum 2.0 GPA ("C" average). Note: A minimum of 24 quarter units must be earned at

De Anza College.

Major courses for certificates and degrees must be completed with a letter grade unless a particular course is only offered on a pass/no-pass basis.

## Wildlife Corridor Technician Certificate of Achievement

This is a technician-level career program that prepares students to use 21st century wildlife corridor (connectivity) practices and technology. It also teaches students the scientific principles of corridor ecology, landscape ecology and ecosystem (adaptive) management. They are trained in Level I introductory wildlife tracking and monitoring, field-based practices and scientific protocols. A wildlife corridor technician applies wildlife corridor principles, theory, and technology to assist in the preservation, protection and restoration of native species and ecosystems.

Student Learning Outcomes - upon completion, students will be able to:

- investigate the practice and technology of wildlife corridors (connectivity or linking landscapes).
- utilize the terminology, concepts, and principles of the environmental sciences, corridor ecology, landscape ecology, ecosystem (adaptive) management, and the Rapid Assessment Methodology (RAM) developed at De Anza College.

1. Meet the requirements for this certificate level.

2. Complete the following.

| ES 65   | Environmental Stewardship |   |
|---------|---------------------------|---|
| ESCI I  | Environmental Science     | 4 |
| ESCI IL | Environmental Science Lab |   |

# Wildlife Corridor Technician and **Environmental Stewardship**

Biological, Health, Environmental Sciences Division/ES Dept. Counseling Center Career Services Info. Student and Community Student and Community Services Bldg. 2nd Fl. Kirsch Center Room 218 Services Bldg. 2nd Fl. 408-864-8628, 8773 408-864-5400 408-864-5400

| ESCI 50 | Introduction to Wildlife Corridor             |      |
|---------|---|------|
|         | Technician: Connectivity                      | 4    |
| ESCI 52 | Wildlife Corridor Technician:                 |      |
|         | Animal Tracking Techniques                    | 4    |
| ESCI 53 | Wildlife Corridor Technician: Data Collection |      |
| ESCI 54 | Wildlife Corridor Technician: Data Analysis   | 3    |
| ESCI 55 | Wildlife Corridor Technician: Corridor Design | 3    |
| ESCI 56 | Wildlife Corridor Technician: Plant Survey    |      |
|         | Techniques                                    | 3    |
| ESCI 57 | Wildlife Corridor Technician:                 |      |
|         | Advanced Tracking                             | 2    |
|         | Total Units Required                          | . 26 |

## Wildlife Corridor Technician Certificate of Achievement-Advanced

This is a technician-level career program that prepares students to use 21st century wildlife corridor (connectivity) practices and technology. It also teaches students the scientific principles of corridor ecology, landscape ecology and ecosystem (adaptive) management. Students are trained in Level 2 advanced wildlife tracking and monitoring, field-based practices and scientific protocols. A wildlife corridor technician applies wildlife corridor principles, theory, and technology to assist in the preservation, protection and restoration of native species and ecosystems.

Student Learning Outcomes - upon completion, students will be able to:

- investigate the practice and technology of wildlife corridors (connectivity or linking landscapes).
- utilize the terminology, concepts, and principles of the environmental sciences, corridor ecology, landscape ecology, ecosystem (adaptive) management, and the Rapid Assessment Methodology (RAM) developed at De Anza College.
- examine local wildlife in the field and the core corridor areas these species utilize.
- examine the data analysis equipment and processes used in wildlife corridor technology in the field.
- apply corridor ecology and connectivity concepts and techniques, including the Rapid Assessment Methodology, to local and statewide corridor cases to develop strategic community-based, collaborative efforts that preserve, protect, and restore native species, ecosystems and the landscape.
- I. Meet the requirements for this certificate level.

| <ol> <li>Complete the course requirements for the<br/>Wildlife Corridor Technician Certificate of Achievement.</li> <li>Complete the following.</li> </ol> |       | 26                            |   |
|--|-------|-------------------------------|---|
| ES   | 66    | Environmental Leadership      | I |
| ES   | 67    | Environmental Team-Building   | 1 |
| ES   | CI 20 | Introduction to Biodiversity  | 5 |
| ES   | CI 58 | Wildlife Corridor Technician: |   |
|  |       | Advanced Tracking 2           | 4 |

Complete a minimum of five (5) units from the following:

- ESCI 82,X,Y,Z Central Coast Wildlife Corridors: Coyote Valley series (1-4 units) ESCI 83,X,Y,Z Central Coast Wildlife Corridors:
- Salinas River Drainage series (1-4 units) ESCI 84,X,Y,Z Central Coast Wildlife Corridors: San Benito River Drainage series (1-4 units)
- ESCI 85,X,Y,Z Central Coast Wildlife Corridors: Pajaro River Drainage series (1-4 units)
- ESCI 86,X,Y,Z Central Coast Wildlife Corridors: Pacheco Pass series (1-4 units)

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| ESCI 87,X,Y,Z | Central Coast Wildlife Corridors:<br>Diablo Range series series (1-4 units)  |
|---------------|--|
| ESCI 88,X,Y,Z | Central Coast Wildlife Corridors:<br>Santa Cruz Mountains series (1-4 units) |
| ESCI 90       | Santa Clara County Field Studies:<br>Tule Elk (1)                            |
| ESCI 91       | Santa Clara County Field Studies:<br>American Badger (1)                     |
| ESCI 92       | Santa Clara County Field Studies:<br>Raptors (I)<br>Total Units Required     |

# **Environmental Stewardship**

#### A.A. Degree

This is a technician-level career program that prepares students to use 21st century wildlife corridor (connectivity) practices and technology. It also teaches students the scientific principles of corridor ecology, landscape ecology and ecosystem (adaptive) management. Students are trained in Level 2 advanced wildlife tracking and monitoring, field-based practices and scientific protocols.

protocols. This degree program teaches future wildlife corridor technicians to apply wildlife corridor principles, theory, and technology to assist in the preservation, protection and restoration of native species and ecosystems. It also teaches them skills useful in helping develop a regional habitat conservation plan (local) and/or natural community and conservation plan (state).

Student Learning Outcomes - upon completion, students will be able to:

- investigate the practice and technology of wildlife corridors (connectivity or linking landscapes).
- utilize the terminology, concepts, and principles of the environmental sciences, corridor ecology, landscape ecology, ecosystem (adaptive) management, and the Rapid Assessment Methodology (RAM) developed at De Anza College.
- examine local wildlife in the field and the core corridor areas these species utilize.
- examine the data analysis equipment and processes used in wildlife corridor technology in the field.
- apply corridor ecology and connectivity concepts and techniques, including the Rapid Assessment Methodology, to local and statewide corridor cases to develop strategic community-based, collaborative efforts that preserve, protect, and restore native species, ecosystems and the landscape.
- communicate with key stakeholders government, resource agencies, agriculture, industry, the public, non-profits - the importance of the relationship between corridor ecology/ connectivity and the public good, particularly enhanced global, cultural, social and environmental well-being.
- I. Meet the AA/AS degree requirements.
- Complete the course requirements listed for the Wildlife Corridor Technician Certificates of Achievement and Achievement-Advanced 42
   Complete the following.

| ESCI 21         | Biodiversity 2                                | 5 |
|-----------------|---|---|
| Complete a mini | mum of five (5) units from the following:     | 5 |
| ES I            | Introduction to Environmental Studies (4)     |   |
| ES 2            | Humans, the Environment and                   |   |
|                 | Sustainability (4)                            |   |
| ES 3            | Imagery of the Énvironment (4)                |   |
| ES 6            | Introduction to Environmental Law (4)         |   |
| ES 55           | Ten Steps to Effective Learning in            |   |
|                 | Environmental Studies (1)                     |   |
| ES 56           | Introduction to Environmental Health (4)      |   |
| ES 61A          | Environmental Protection and Pollution        |   |
|                 | Prevention: Local and Regional (4)            |   |
| ES 63           | Agenda 21: Blueprint for Sustainability (1)   |   |
| ES 68           | Community-Based Coalitions & Stakeholders (1) |   |
| ES 80           | California Field Studies (1)                  |   |
| ES 85A          | California Native Plants and Animals (2)      |   |
| ES 86           | Global Field Studies (4)                      |   |
| ES 90           | Environmental Research and Field Methods (4)  |   |

| ES 91X              | Environmental Education and<br>Nature-Based Learning (2)                    |       |
|---------------------|---|-------|
| ES 91Z              | Environmental Education and   |       |
| ES 93               | Nature-Based Learning (4)<br>Sustainability Across the Curriculum (1)       |       |
| ES 95               | Introduction to Environmental Careers (1)                                   |       |
| ES 95B              | Environmental Studies Internship (2)  |       |
| ESCI 19<br>ESCI 30  | Environmental Biology (5)<br>Conservation Biology (5)                       |       |
| CHEM I A            | General Chemistry (5)   |       |
| CHEM 10<br>CHEM 30A | Introduction to Chemistry (5)<br>Introduction to General, Organic           |       |
| CHEFTSOA            | and Biochemistry I (5)  |       |
| CHEM 50             | Preparatory Course for General Chemistry (5)                                | l     |
| GEO I<br>HIST 28    | Physical Geography (4)<br>Social Environmental History (4)                  |       |
| MET 10              | Weather and Climate Processes (5)   |       |
| MET 10L<br>PHYS 50  | Meteorology Laboratory (1)<br>Preparatory Physics (4)                       |       |
|                     |   |       |
| Major               | · · · · · · · · · · · · · · · · · · ·                                       | units |
| GE<br>Electives     | General Education (31-42 units)<br>Elective courses req'd. when major units |       |
|                     | plus GE units total is less than 90   |       |
|                     | Total Units Required  | units |