APPLIED GENETICS OPTION

This option is offered within the following major(s):

- Bioresource Research - College of Agricultural Sciences (http://catalog.oregonstate.edu/college-departments/agricultural-sciences/other-degrees-programs/bioresource-research-bs-hbs)

Applied genetics is directed at changing the genomes of organisms, to increase their utility to humans. Techniques are derived from cytogenetics, molecular biology, and Mendelian and quantitative genetics. Typically, applied geneticists have expertise in one or more related fields of study such as agronomy, biochemistry, botany, entomology, food processing, forestry, microbiology, pathology, physiology, and statistics.

The goals of applied genetics include:

1. improving the quality of food and fiber products,
2. improving the cost efficiency of a given product, and
3. minimizing adverse environmental effects of food or fiber production.

Students in this option will be well prepared for positions in biosciences and agriculture, or in graduate and professional programs.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>PBG 430 &amp; PBG 450</td>
<td>PLANT GENETICS and PLANT BREEDING</td>
<td>7</td>
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<tr>
<td>or ANS 378</td>
<td>ANIMAL GENETICS</td>
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<tr>
<td>ST 411</td>
<td>METHODS OF DATA ANALYSIS</td>
<td>4</td>
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**Specialization and Breadth Courses**

Select 18 to 21 credits approved by option faculty and research mentor.

Total Hours: 29-32

Option Code: 114