

## MEDFORD PUBLIC SCHOOLS - DEPARTMENT OF SCIENCE POLICY ON DISSECTION AND DISSECTION ALTERNATIVES



In accordance with the 2005 Board of Education's Policy on Dissection and Dissection Alternatives, Medford High School has developed the following policy.

Participation in hands-on science is important to learning science, and dissections are a valuable learning experience in which all students are encouraged to participate. When dissection is used in the classroom:

- ◆ Teachers will thoroughly explain the learning objectives of the lesson and use written and/or audio-visual materials as appropriate to maximize the educational benefits of the experience.
- ◆ All specimens will be treated with respect.
- ◆ All students will be informed, prior to dissection, that they have the option of discussing individual concerns about dissection with the appropriate teacher.
- ◆ Upon completion of the dissection, the remains will be appropriately disposed of as recommended by the local board of public health.

The science courses that include dissection also include dissection alternatives. Upon written request of a student's parent or guardian, Medford High School will permit a student who objects to dissection activities to demonstrate competency through an alternative method.

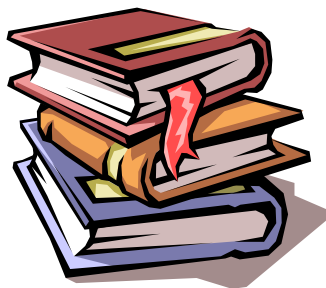
Currently, Medford High School offers the following courses that include dissection: Biology and Anatomy & Physiology. Specific dissection and dissection alternatives will be listed on the course syllabi, available to students enrolled in these courses. Alternative activities may include the use of hands-on models, written reference materials, digital photos, web-based sites, computer software, and/or other appropriate research activities.

The procedure for a student to participate in an alternative activity in place of dissection is as follows:

- ◆ The student will notify the science teacher of his/her choice to participate in an alternative activity in place of dissection.
- ◆ The student will submit a written request from a parent or guardian to the science teacher. (See attached form.)
  - A student who is age 18 or over may sign the form him/herself.
- ◆ The student will be provided with an alternative activity to be determined by the teacher who will specify what is expected of the student. Alternative activities will allow the student to gain the same content knowledge as a dissection activity, and will allow for a comparable investment of time and energy by the student.
- ◆ The student will accept responsibility for completing the alternative activity within the assigned time and is expected to learn the same content knowledge as if the student was performing the dissection activity.
- ◆ The student will be subject to the same course standards and examinations as other students in the course.

This policy will be provided to all teachers of science courses that involve dissection at the start of each school year.

**MEDFORD PUBLIC SCHOOLS - DEPARTMENT OF SCIENCE  
FORM TO REQUEST DISSECTION ALTERNATIVES**



*Note: This form is provided for the convenience of parents or guardians who wish to use it. Parents or guardians are not required to use this particular form, but must notify the school in writing if requesting that an alternative to dissection be provided for a student.*

Date: \_\_\_\_\_

Dear: \_\_\_\_\_

I understand that participation in hands-on science is important to learning science and that dissections are an important component of comprehensive science and life science education. I also understand that alternatives to dissection are available and that upon written request of a parent or guardian, Medford High School will permit a student to demonstrate competency through an alternative method such as the use of hands-on models, written reference materials, digital photos, web-based sites, computer software, and/or other appropriate research activities. I further understand that students who participate in alternative activities instead of dissection are subject to the same course standards and examinations as other students in the course.

I request that my child, \_\_\_\_\_, be permitted to demonstrate competency through an alternative method rather than participating in the dissection.

Sincerely,

\_\_\_\_\_  
Signature of Parent or Guardian

\_\_\_\_\_  
Printed name of Parent or Guardian

**MEDFORD PUBLIC SCHOOLS - DEPARTMENT OF SCIENCE  
DISSECTION ALTERNATIVES**

Currently, Medford High School offers the following courses that include dissection: Biology and Anatomy & Physiology. Specific dissection and dissection alternatives will be listed on the course syllabi, available to students enrolled in these courses. Alternative activities may include the use of hands-on models, written reference materials, digital photos, web-based sites, computer software, and/or other appropriate research activities. In addition, students may assume different roles in the dissection labs that allow them to refrain from the active dissection work.

Where technology is available, students may access sites with guidance from their teacher. The following chart identifies alternative web-based dissection activities by course.

<b>COURSE</b>	<b>DISSECTION ACTIVITY</b>	<b>DISSECTION ALTERNATIVE</b>
Honors Biology I	Earthworm	<ul style="list-style-type: none"> <li>◆ <a href="http://biog-101104.bio.cornell.edu/BioG101_104tutorials/animals/earthworm.html">http://biog-101104.bio.cornell.edu/BioG101_104tutorials/animals/earthworm.html</a></li> <li>◆ <a href="http://www.flushing.k12.mi.us/srhigh/tippettl/biology/lum/index/html">http://www.flushing.k12.mi.us/srhigh/tippettl/biology/lum/index/html</a></li> <li>◆ <a href="http://scienceman.org/dissection.html">http://scienceman.org/dissection.html</a></li> <li>◆ <a href="http://biology.about.com/cs/dissections/%OD">http://biology.about.com/cs/dissections/%OD</a></li> </ul>
Honors Biology I	Mussel/Clam	<ul style="list-style-type: none"> <li>◆ <a href="http://biog-101-104.bio.cornell.edu/BioG101_104/tutorials/animals/clam.html">http://biog-101-104.bio.cornell.edu/BioG101_104/tutorials/animals/clam.html</a></li> <li>◆ <a href="http://www.staff.brookings.k12.sd.us/Reidell/Clam%20Dissection_files/frame.htm">http://www.staff.brookings.k12.sd.us/Reidell/Clam%20Dissection_files/frame.htm</a></li> </ul>
Honors Biology I	Crayfish	<ul style="list-style-type: none"> <li>◆ <a href="http://biology.about.com/cs/dissections/%OD">http://biology.about.com/cs/dissections/%OD</a></li> <li>◆ <a href="http://www.mackers.com/crayfish/">http://www.mackers.com/crayfish/</a></li> <li>◆ <a href="http://bioweb.uwlax.edu/zoolab/Table_of_Contents/Lab-7b/lab-7b.htm">http://bioweb.uwlax.edu/zoolab/Table_of_Contents/Lab-7b/lab-7b.htm</a></li> <li>◆ <a href="http://www.flushing.k12.mi.us/srhigh/tippettl/biology/cray/index.html">http://www.flushing.k12.mi.us/srhigh/tippettl/biology/cray/index.html</a></li> <li>◆ <a href="http://biosci.ohiou.edu/introbioslab/bios173/images/lab7/crayfish.htm">http://biosci.ohiou.edu/introbioslab/bios173/images/lab7/crayfish.htm</a></li> <li>◆ <a href="http://biog-101-104.bio.cornell.edu/BioG101_104/tutorials/animals/crayfish.html">http://biog-101-104.bio.cornell.edu/BioG101_104/tutorials/animals/crayfish.html</a></li> </ul>
Honors Biology I	Grasshopper	<ul style="list-style-type: none"> <li>◆ <a href="http://creatures.ifas.ufl.edu/orn/lubber.htm">http://creatures.ifas.ufl.edu/orn/lubber.htm</a></li> <li>◆ <a href="http://www.ent.iastate.edu/dept/courses/ent201/biologyanatomy/0820anatomy.html">http://www.ent.iastate.edu/dept/courses/ent201/biologyanatomy/0820anatomy.html</a></li> <li>◆ <a href="http://io.uwinnipeg.ca/~simmons/lb7pg5.htm">http://io.uwinnipeg.ca/~simmons/lb7pg5.htm</a></li> <li>◆ <a href="http://bioweb.uwlax.edu/zoolab/Table_of_Contents/Lab-7b/lab-7b.htm">http://bioweb.uwlax.edu/zoolab/Table_of_Contents/Lab-7b/lab-7b.htm</a></li> <li>◆ <a href="http://rydberg.biology.colostate.edu/Dissections/grasshopper.htm">http://rydberg.biology.colostate.edu/Dissections/grasshopper.htm</a></li> </ul>
Honors Biology I	Starfish	<ul style="list-style-type: none"> <li>◆ <a href="http://library.thinkquest.org/13008/tableof.htm">http://library.thinkquest.org/13008/tableof.htm</a></li> </ul>
Honors Biology I	Perch	<ul style="list-style-type: none"> <li>◆ <a href="http://bioweb.uwlax.edu/zoolab/Table_of_Contents/Lab-9b/Perch_Mount_1/perch_mount_1.htm">http://bioweb.uwlax.edu/zoolab/Table_of_Contents/Lab-9b/Perch_Mount_1/perch_mount_1.htm</a></li> <li>◆ <a href="http://www.flushing.k12.mi.us/srhigh/tippettl/biology/perch/">http://www.flushing.k12.mi.us/srhigh/tippettl/biology/perch/</a></li> </ul>
Honors Biology I	Frog	<ul style="list-style-type: none"> <li>◆ <a href="http://scienceman.org/dissection.html">http://scienceman.org/dissection.html</a></li> <li>◆ <a href="http://biology.about.com/cs/dissections/%OD">http://biology.about.com/cs/dissections/%OD</a></li> <li>◆ <a href="http://froggy.lbl.gov/">http://froggy.lbl.gov/</a></li> <li>◆ <a href="http://curry.edschool.virginia.edu/go/frog/home.html">http://curry.edschool.virginia.edu/go/frog/home.html</a></li> <li>◆ <a href="http://bioweb.uwlax.edu/zoolab/Table_of_Contents/Lab-9b/lab-9b.htm">http://bioweb.uwlax.edu/zoolab/Table_of_Contents/Lab-9b/lab-9b.htm</a></li> <li>◆ <a href="http://www.flushing.k12.mi.us/srhigh/tippefttl/biology/frog/index.html">http://www.flushing.k12.mi.us/srhigh/tippefttl/biology/frog/index.html</a></li> </ul>
Anatomy & Phys.	Pig	<ul style="list-style-type: none"> <li>◆ <a href="http://www.whitman.edu/biology/vpd/">http://www.whitman.edu/biology/vpd/</a></li> </ul>

Anatomy & Phys.	Cat	◆ <a href="http://library.thinkquest.org/15401/learn.html">http://library.thinkquest.org/15401/learn.html</a>
	Cow's Eye	◆ <a href="http://www.exploratorium.edu/learning_studio/cow_eye/index.html">http://www.exploratorium.edu/learning_studio/cow_eye/index.html</a>
	Heart	◆ <a href="http://sln.fi.edu/biosci/heart.html">http://sln.fi.edu/biosci/heart.html</a>
	Brain	◆ <a href="http://ww.vh.org/adult/provider/anatomy/BrainAnatomy/BrainAnatomy.html">http://ww.vh.org/adult/provider/anatomy/BrainAnatomy/BrainAnatomy.html</a>
	Mink	◆
	Sheep brain	◆ <a href="http://academic.uofs.edu/department/psych/sheep/ieframerow.html">http://academic.uofs.edu/department/psych/sheep/ieframerow.html</a> ◆ <a href="http://exploratorium.edu/memory/braindissection/index.html">http://exploratorium.edu/memory/braindissection/index.html</a>