

DIOCESAN SCIENCE PHILOSOPHY

As Catholic Christians in the Diocese of Oakland, we believe that science embraces humankind's efforts to understand the workings of the universe and to appreciate the splendors of God's creation. The study of science sheds light on the principles and processes that shape the natural world, nourishes our intrinsic curiosity about the world, and guides us in applying logical methods to explore its mysteries. Science stresses the importance of critical thinking and open-mindedness, and is a discipline founded on continual investigation, self-review, and evolution of ideas.

As science educators we ---

- communicate an appreciation of the subject.
- inspire confidence in children.
- strive to teach the students to be good stewards of their environment.
- teach critical thinking skills along with the scientific method through the use of the hands-on-approach.
- enable the student to acquire a method of attacking new problems with an open mind.
- integrate science with other subjects above and beyond math and technology.
- use alternative methods of assessment of student knowledge and application of processes.
- challenge the social misconception that success in science is related to gender.
- creatively use materials available.
- challenge students to understand the ethical use of scientific results.
- teach programs in compliance with Oakland Diocesan Guidelines (in conjunction with California State Guidelines) for science according to grade level.
- give equal access to science to *all* students
- provide students with information that will enable them to make life long healthy choices.

As educators we face a complex and difficult task. We cannot present the entire body of scientific knowledge because there is too much to teach. We can hope for best results if we clearly present how science works and the processes and methods which expand scientific knowledge. A stimulating classroom environment can nurture natural curiosity to convey the excitement of science. Nature itself is morally and ethically neutral, but those who deal with science must make important moral and ethical choices. We have the responsibility of confronting students with political and social issues that require an understanding of science.

(California State Science Framework, 1990).

It is our hope that all students will grow in appreciation of the beauty of God's world, to treat their environment responsibly and feel confident to accept the moral and ethical challenges that are presented to them with the advancement of technology. It is also our hope that all students understand that the field of science is continually being discovered and that staying informed on current events in the world of science can only serve to make students better understand the world in which they live.