

Laser Safety and Requirements

INTRODUCTION

Lasers are used in a wide range of research and may be found within common laboratory devices such as microscopes or spectrometers. Some of these lasers are hazardous, with potential to cause injury. Such lasers are regulated by the State of Florida and require special handling.

LASER CLASSES

There are two classes of hazardous lasers:

- 1. Class 3B lasers have a power output of more than 5mW and may cause injury if viewed directly
- 2. Class 4 lasers have a power output of more than 500mW and may cause injury if viewed either directly or indirectly or if exposed to skin

Hazardous lasers manufactured in the United States and Europe have been classified by the manufacturer. Typically this classification may be found on a small yellow label on the laser device.



LASER REQUIREMENTS

Class 3B and Class 4 laser labs shall:

- Register all Class 3B/4 lasers with UF EH&S
- Receive a laser safety inspection every six months
- Be posted with appropriate signs
- Have, and require the use of, appropriate protective eyewear
- Train all laser users and restrict laser use to those users

Class 3B should and Class 4 laser labs shall:

- Have a standard operating procedure available for the lasers in use
- Have an emergency off device for each laser
- Have an indicator of laser use at the entry to the lab (ie a "laser in use" light)
- Have an interlock or security latch in place at the entrance to the lab
- Control entry to the lab
- Control possible escape of laser radiation through windows and other portals

CONTACTS AND RESOURCES

Registration, training information and UF's Laser Safety Manual may be found at the UF EH&S Laser Safety website: http://www.ehs.ufl.edu/programs/rad/laser/

Contact <u>lso@ehs.ufl.edu</u> or 392-7359 with any questions.