

## Laser Use Authorization Form

### Part I- Laser Registration

**NOTE:** All lasers of Class 3B and Class 4 must be registered with the Environmental Health and Safety Office.

- Please complete this form for each Class 3B or 4 laser you plan to acquire (or already have) and email to [ehs@chapman.edu](mailto:ehs@chapman.edu).
- An email confirmation will be sent to the applicant notifying the receipt of Part I and Part II of this LUA application.
- EH&S approval is required before putting laser into operation. Allow up to 30 days from receipt of completed LUA application, Part I and Part II.

Section A: Laser Holder and General Information			
<b>Principal Investigator (PI):</b>			
<b>Office Phone Number:</b>		<b>E-mail Address:</b>	
<b>Laser Operator(s):</b> (Check all that apply)		<input type="checkbox"/> Paid Staff/Faculty <input type="checkbox"/> Enrolled Students <input type="checkbox"/> Volunteer Employees <input type="checkbox"/> Visitors	
<b>Laser Manufacturer:</b>		<input type="checkbox"/> Chapman Fabricated Laser	
<b>Model Number:</b>		<b>Serial Number:</b>	
<b>Type of Laser Equipment:</b>			
<b>Type of Registration:</b>		<input type="checkbox"/> New laser/laser system acquisition or installation <input type="checkbox"/> Alteration/ transfer/status change of an existing laser system* (Explain in <i>Comments</i> section below).	
Section A: Location and Laser Details			
<b>Department:</b>		<b>Building:</b>	<b>Room Number:</b>
<b>Laser Classification (Check one):</b>		<input type="checkbox"/> <b>Class 3B</b> (5-500 mW) or ( $\leq 125$ mJ pulsed) <input type="checkbox"/> <b>Class 4</b> (>500 mW) or (>125 mJ pulsed)	
<b>Active Medium (i.e. Argon, Ruby, Nd:YAG, Diode):</b>			
<b>Tunable Laser? (Check one):</b>		<b>Details:</b>	
<input type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Wavelength(s) (nanometers)</b>			
<b>Beam Divergence</b>		<b>mrad</b>	
<b>Beam Diameter at laser output:</b>		<b>mm</b>	
<b>Purpose and Frequency of Use:</b>			
<input type="checkbox"/> Research <input type="checkbox"/> Classroom			
<input type="checkbox"/> Continuous Wave		<b>Average Power (W):</b>	<b>Maximum Power (W):</b>
<input type="checkbox"/> Repetitively Pulsed		<b>Energy per Pulse (J):</b>	<b>Pulse repetition frequency (Hz):</b>
<input type="checkbox"/> Single Pulse		<b>Pulse duration (nsec):</b>	<b>Pulse width (s):</b>
<input type="checkbox"/> Q-Switched		<b>Peak Pulse Power (W):</b>	<b>Peak Power Density (W/cm<sup>2</sup>):</b>

\*Alterations include any changes(s) that substantially increases or decreases the output or wavelengths produced. Relocation from one workspace to another or transfer to a new owner is also an "alteration."

**Please check all items that apply to your operation:**

- Invisible Beam (IR or UV)
- Exposed Beam Path
- Chapman Modified Laser
- High Voltage (660V)
- Beam Focusing Optics
- Frequency-doubling Crystal
- Multi-Use Room
- Outdoor Use
- Laser Cutting/Welding
- Public Theater
- Creative Arts
- 3-D Printer

**Comments:****Laser Use Status:**  Ready to Use  In Storage (useable, stored)  Needs Repair (not useable)

Principal Investigator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**By manually signing this form or printing my name electronically, I acknowledge that all statements are true and accurate. I certify the laser(s) will be used as described in this application and that all applicable provisions of the State of California Code of Regulations pertaining to the use of lasers and all Chapman University policies, guidelines, and standard operating procedures and specific approval conditions required by EH&S now or hereafter in effect will be observed.**

**Section C: All personnel authorized to use lasers and/or laser systems under this LUA must be listed below:**

<b>First</b>	<b>Last</b>	<b>Email Address</b>	<b>ID #</b>

## Part II- Laser Use Details- Required for LUA

### A. For lasers mothballed and not used.

1. This laser is in storage and not in use. \_\_\_\_\_ *Initials*
2. I understand that I will notify the LSO if there is any change, such as prepare it for use or if I dismantle/discard or sell/transfer it.
3. If I decide to put this laser/laser system into use, I will fill out Part II of the LUA application and submit it to the LSO.

### B. Security and Access Control

GOAL: Preventing unauthorized people from entering the control area

1. **How will you prevent unauthorized users from entering the control area? How will you protect visitors, custodians or other "civilians" when the laser is operating?** *Examples: Locks on doors, warning lights, signs, training.*

GOAL: Preventing the laser beam from leaving the optics table or controlled area

2. **Describe your interlocks or other engineering controls.** *Examples: Interlocked doors or gates, use of beam stops or dumps, barriers, and shields (opaque and fire resistant).* If none, explain your alternative methods.

GOAL: Preventing unauthorized access or accidental contact with the laser beam of non-laser users in the room/area

3. **Describe the engineering or management controls you will have in place to prevent room occupants contact with the laser beam.** *Example: infrared and ultraviolet sensor cards, infrared viewers, partitions, lab rules, barriers on optics table to protect users working at computer, etc.*

### C. Protective Personal Equipment

1. Is eye protection required for entry or certain tasks?  Yes  No  
If **NO** eye protection will be required, please explain:

\_\_\_\_\_

2. When will you require laser users to wear eye protection?

- a. At all times when using the laser?  Yes  No

**Specify Details:** \_\_\_\_\_

**Wavelength(s) are you protecting against?** \_\_\_\_\_

**Duration of Exposure:** \_\_\_\_\_

**Specific eyewear required:** \_\_\_\_\_

- b. During alignment?  Yes  No

**Specify Details:** \_\_\_\_\_

**Wavelength(s) are you protecting against?** \_\_\_\_\_

**Duration of Exposure:** \_\_\_\_\_

**Specific eyewear required:** \_\_\_\_\_

- c. For entry into control area?  Yes  No

**Specify Details:** \_\_\_\_\_

**Wavelength(s) are you protecting against?** \_\_\_\_\_

**Duration of Exposure:** \_\_\_\_\_

**Specific eyewear required:** \_\_\_\_\_

- d. For entry to room? (Including visitors)  Yes  No

**Specify Details:** \_\_\_\_\_

**Wavelength(s) are you protecting against?** \_\_\_\_\_

**Duration of Exposure:** \_\_\_\_\_

**Specific eyewear required:** \_\_\_\_\_

3. Specify the type of protective eyewear available to laser users in the area.

	Brand	Model	Rated Wavelength	O.D.
A				
B				
C				
D				

#### D. Administrative

Please attach written safety operating procedures (SOPs) for such tasks as **Alignments, Emergency Shutdown, Powering-up, and Laser Eyewear Use** with this LUA application.

By my signature, I acknowledge that I may not begin using the laser until my Laser Use Authorization has been approved by EH&S.

\_\_\_\_\_  
 Laser Use Authorization Holder Signature

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 LSO Signature

\_\_\_\_\_  
 Date