EAS 199B: Checklist for salinity and temperature control

Date:

Group members: Sub-project Leader

Your score	Max score	
_____	10	Plot(s) showing measurement of constant K for the thermal response of the system.
_____	5	Value of K is reasonable
_____	5	Plot(s) showing measurement of variation used to estimate the deadband.
_____	5	Value of deadband is given, and is reasonable
_____	5	Relay circuits for heater appear to be correct
_____	5	LCD panel displays heating status and water temperature, in addition to the salinity control status
_____	15	System responds to disturbance caused by addition of DI water: Salinity value on LCD changes, salty valve opens, system returns to equilibrium
_____	15	System responds to disturbance caused by addition of salty water: Salinity value on LCD changes, DI valve opens, system returns to equilibrium
_____	15	System responds to disturbance caused by addition of warm or cold water: Heater turns on as needed; system returns to equilibrium
_____	15	System controls salinity between LCL and UCL, and temperature within the deadband
	95	Total

Sub-project Leader

_____	5	Clear and responsive communication with instructor
_____	5	System is organized and ready for in-class verification
_____	5	All team members are knowledgable about system operation
	15	