DEPARTMENT OF DEEP SEA STUDIES (FICTITIOUS DEPT.) BUSINESS CONTINUITY PLAN

Most recent update: June 15, 2007

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Appendix: List of Key Documents

PART 1 – GENERAL INFORMATION

◆ This Business Continuity Plan is for: which is within

Department of Deep Sea Studies (fictitious dept.)

L&S, Division of Physical Sciences

♦ Number of personnel (approximate headcount):

Faculty and other academic appointees: 17
Staff (full-time): 10
Staff (part-time, excluding students): 2
Student-staff: 16
Other: 18

◆ Location(s):

Higgins Hall Rogers Hall

Berthing facilities for research ship MV California at Oakland Pier 34

◆ Any rented space?

No

◆ Location(s) of rented space?

None

◆ Comment:

"Other" staff is the crew of the research vessel MV California -- 5 FTE plus 13 seasonal employees.

- ◆ Critical Functions performed by this unit. (functions that are essential to the conduct of UCB's teaching, research & public service activities during a major crisis):
 - Classroom instruction
 - Research
 - Payroll
 - Purchasing
 - Donor relations
- ◆ Extraordinary functions (special functions that this us there a specific plan for this extraordinary function? unit may need to perform during a time of crisis):
- ◆ Functions judged to be non-critical:
 - Publish quarterly Deep Sea Journal
 - Education cruisés for public in off-season
- ◆ Contact person(s) for this business continuity plan:

Mary Jones

PART 2 - ACTION ITEMS TO INCREASE OUR READINESS

"An ounce of prevention is worth a pound of cure."

The most effective way to handle a major disaster is to act ahead of time to reduce (mitigate) the potential impacts. Our business continuity plan identifies a number of such mitigative actions. We call them **ACTION ITEMS**.

Some of these Action Items may be doable now. Others may require additional resources. Still others may be within the province of another unit, or of the campus as a whole. Taken together, these Action Items are the most important outcome of business continuity planning – a "To Do List" for disaster readiness.

Action Item

Details

1.	Develop plan for alternate space in
	case some classrooms are not usable.

Supports which critical function:	Classroom instruction		
Estimated cost:	\$100 - \$1,000		
Is cost one-time or annual?	One-time		
Within whose scope:	the campus		
Status:	In progress		

Request faculty committee to develop strategy for alternate-channel delivery of courses (in case there is a temporary shortage of classrooms post-disaster).

Supports which critical function:	Classroom instruction			
Estimated cost:	\$100 - \$1,000			
Is cost one-time or annual?	One-time			
Within whose scope:	my unit together with other units on campus			
Status:	Not yet begun			

 Request faculty committee to develop strategy for secure storage of non-electronic research materials.

Supports which critical function:	Faculty Preparedness			
Estimated cost:				
Is cost one-time or annual?				
Within whose scope:				
Status:	Needs further discussion			

4. Do periodic trial-recoveries of servers/applications.

Supports which critical function:	Information Technology		
Estimated cost:	\$1,000 - \$10,000		
Is cost one-time or annual?	Annual		
Within whose scope:	my unit together with other units on campus		
Status:	In progress		

 Have department IT Manager discuss work-from-home issues at faculty meeting.

Supports which critical function:	Information Technology		
Estimated cost:	less than \$100		
Is cost one-time or annual?	One-time		
Within whose scope:	my unit itself		
Status:	Completed		

 Make mutual arrangements with sister UC campuses to borrow technical staff if needed during recovery.

Supports which critical function:	Information Technology		
Estimated cost:	Don't know		
Is cost one-time or annual?			
Within whose scope:	the campus		
Status:	In progress		

7. Cross-train 2 staff members to process dept. payroll (to serve as backup for Harry Chan).

Supports which critical function:	Payroll		
Estimated cost:	less than \$100		
Is cost one-time or annual?	Annual		
Within whose scope:	my unit itself		
Status:	In progress		

0. 0		
Cross-train 2 staff members to do departmental purchasing as backup for	Supports which critical function:	
George.	Estimated cost:	less than \$100
Ĭ.	Is cost one-time or annual?	Annual
	Within whose scope:	my unit itself
	Status:	In progress
Investigate whether BluCard limits &		
restrictions can be lifted for recovery	Supports which critical function:	
period.	Estimated cost:	less than \$100
	Is cost one-time or annual?	One-time
	Within whose scope:	my unit together with other units on campus
	Status:	Completed
L	Oldido.	Completed
10. Obtain 2 additional BluCards.	Supports which critical function:	Purchasing
ľ	Estimated cost:	less than \$100
	Is cost one-time or annual?	One-time
	Within whose scope:	my unit itself
	Status:	Completed
44 5		
11. Design departmental networks to allow faculty & students to connect remotely	Supports which critical function:	
(e.g. from home) in case office/lab	Estimated cost:	Don't know
space is damaged.	Is cost one-time or annual?	One-time
	Within whose scope:	my unit together with other units on campus
	Status:	Needs further discussion
12. Develop a fund for emergency grants to		
faculty & graduate students to cover	Supports which critical function:	
expenses of conducting research in	Estimated cost:	Don't know
alternate ways or at alternate locations.	Is cost one-time or annual?	Annual
	Within whose scope:	·
L	Status:	Not yet begun
13. Develop plan for alternate office space	Supports which critical function:	Research
for faculty & graduate students in case	Estimated cost:	
normal office space is not usable.	Is cost one-time or annual?	One-time
	Within whose scope:	my unit together with other units on campus
	Status:	Not yet begun
		, ,
14. Encourage faculty to request seismic	Supports which critical function:	Research
holting and bracing of furniture and		
bolting-and-bracing of furniture and equipment. (Allocate departmental	Estimated cost:	\$10,000 - \$100,000
equipment. (Allocate departmental funds – first come/first served up to	Estimated cost: Is cost one-time or annual?	\$10,000 - \$100,000 One-time
equipment. (Allocate departmental		
equipment. (Allocate departmental funds – first come/first served up to	Is cost one-time or annual?	One-time my unit together with other units on
equipment. (Allocate departmental funds – first come/first served up to funding limit)	Is cost one-time or annual? Within whose scope: Status:	One-time my unit together with other units on campus In progress
equipment. (Allocate departmental funds – first come/first served up to	Is cost one-time or annual? Within whose scope: Status: Supports which critical function:	One-time my unit together with other units on campus
equipment. (Allocate departmental funds – first come/first served up to funding limit)	Is cost one-time or annual? Within whose scope: Status: Supports which critical function: Estimated cost:	One-time my unit together with other units on campus In progress
equipment. (Allocate departmental funds – first come/first served up to funding limit)	Is cost one-time or annual? Within whose scope: Status: Supports which critical function: Estimated cost: Is cost one-time or annual?	One-time my unit together with other units on campus In progress
equipment. (Allocate departmental funds – first come/first served up to funding limit)	Is cost one-time or annual? Within whose scope: Status: Supports which critical function: Estimated cost:	One-time my unit together with other units on campus In progress

PART 3 - INFORMATION & STRATEGIES FOR OPERATING DURING CRISIS

- how to continue or resume our critical functions

Contents

- 3A Critical Functions
- 3B Information Technology
- 3C Faculty Preparedness
- 3D Key People & Resources

3A. CRITICAL FUNCTIONS

Critical Function #1: Classroom instruction

◆ Description of this critical function:

Undergraduate & graduate instruction, including staff support of faculty.

◆ Section or unit that performs this function (if applicable):

N.A.

◆ Responsible person(s):

Faculty instructors
Graduate student instructors

◆ Upstream dependencies (units or systems whose failure-to-perform will affect us):

Registrar's Office (undergrad registration, course & classroom scheduling) Financial Aid Office (undergrad financial aid)

Graduate Division Office (grad student registration & financial aid)

Facilities Management (space)

Media Services (classroom eléctronics)

Campus Bookstore (book ordering & sales)

◆ Downstream dependencies (units or systems that will be affected by our failure-to-perform):

Students

◆ Peak periods: Comment on peak periods

January, August, start of semesters

- ◆ Space: How to perform this function if the usual space is not available:
 - --- We will depend on the Campus to handle space issues.
 - --- In the event that sufficient classroom space is not available, the Chair has provided to the Registrar (in advance of each semester) a prioritization of courses for post-disaster resumption. Courses of lower priority for which classroom space is not available either will be held at an informal location chosen by the Faculty Instructor, or will be cancelled.
- ◆ Equipment: How to perform this function if the usual equipment is not available:

The equipment most necessary for classroom instruction are

- --- textbooks
- --- computers (faculty & student)
- --- library materials.

Classes could begin in the absence of any one of these three, perhaps even two of the three. However, all three would need to be available by the end of the first month of instruction. If the interruption were to occur partway through the semester, functioning in the absence of any of the three would be more difficult.

- ◆ Staff: How to perform this function if faculty/staff absenteeism averages 50% for two months (e.g. during pandemic flu):
 - --- Staff: We could prioritize staff work and share tasks among those who are at work. We would need to cross-train in advance for this to succeed.
 - --- Faculty: We could tap graduate student instructors to fill in for absent faculty. Temporary lecturers might also be obtained from the SF Maritime Institute. The Chair's list of potential faculty recruits could also be a source of names.

- Unique skills: Are there any personnel with unique skills, knowledge, or files whose absence would create difficulty? Faculty. See above.
- ◆ Working at home: Can this critical function be performed with some (or all) staff working from home? What equipment, supplies, and arrangements would be needed?
 - --- Staff can work from home if their computers are adequate & if they have broadband connections (cable, DSL). Some staff currently work from home. We use Windows Remote Desktop.
 - --- Some faculty could work from home using podcast technology. Most could not.
- ◆ Data networks: How to perform this function if computer networks are not available:

Classes could be held in the absence of computer networks for about one month, but would require the networks to function after that time. If the interruption occurs partway through a semester, tolerance for non-functioning networks would be lower.

◆ Show Stoppers (resources that cannot be replaced, substituted, or done without):

Most faculty

Most graduate student instructors.

◆ Campus closure: If campus closure were declared, would it be POSSIBLE to stop doing this critical function for a month or two?

Yes

◆ Comment:

Exception is if if MV California is at sea.

◆Risks generated by using alternate procedures:

Primary risk is that students would be unable to take desired courses.

- ◆ Policy exceptions needed for alternate procedures (& who can grant these exceptions):

 Changes in curriculum & academic calendar. Need approval by Dean, Executive Vice Chancellor, and Academic Senate.
- ◆ Timing: when must this function restart, to enable the campus to meet its 30-day goal for restarting teaching and research?

 30 days post-disaster (simultaneous with teaching/research)
- ◆ Additional vulnerabilities (other things that could prevent continuing this function, or restarting it on time):

 None that we can think of.

◆ Records that will be vital for restarting this function:

Name of Records:	Student folders		
Medium:	Paper		
Owner:	My own dept or school owns these records		
Location:	234 Higgins Hall		
Backup details:	2		
Comment: Almost all information in these folders is available elsewhere, but inconvenie reconstructing would be considerable.			

Name of Records:	student course rosters				
Medium:	Paper				
Owner:	My own dept or school owns these records				
Location:	453 Higgins Hall				
Backup details:	4				
Comment:	These are the only documents that record fulfillment of specific course reqts leading to the award of credit for that course.				

◆ Consequences: if this function is not restarted on time, these harmful consequences might result:

Possible Harmful Consequence	How long after the disaster might this harm begin to occur?				Comment?		
	0-2 days	1 wk	2 wks	3 wks	4 wks	>4 wks	
Disruption of teaching			Х				more than 2 weeks without classes is hard to recover from.
Disruption of research							
Loss of faculty							
Loss of staff							

Loss of students				
Well-being of faculty/staff				
Well-being of students				
Payment deadlines unmet by campus				
Loss of revenue to campus		Х		lost tuition if students leave
Legal obligations unmet by campus				
Legal harm to university				
Impact on other campus unit(s)				
Impact on important business partner(s)				
Other				

♦ Key Documents: See Appendix.

Critical Function #2: Research

◆ Description of this critical function:

Faculty research & graduate student research, including staff support

◆ Section or unit that performs this function (if applicable):

N.A

◆ Responsible person(s):

Faculty

- ◆ Upstream dependencies (units or systems whose failure-to-perform will affect us):
 - --- Campus libraries
 - --- Campus IT networks
 - --- Facilities Management (space)
 - --- Sponsored Projects Office (communication with grantors)
- ◆ Downstream dependencies (units or systems that will be affected by our failure-to-perform):

Faculty

Graduate students

◆ Peak periods: Comment on peak periods

April, May, November, December

Peak periods are typically connected with the fall & spring research expeditions of the MV California.

◆ Space: How to perform this function if the usual space is not available:

--- We will depend on the Campus to handle space issues.

- --- In the event that the usual office space for faculty & graduate students is not available, faculty & grad students will be encouraged & assisted to work from home (see action items below).
- ◆ Equipment: How to perform this function if the usual equipment is not available:

The equipment most necessary for research in the field of Deep Sea Studies are

- --- computers
- --- diving equipment & undersea measuring instruments
- --- library materials.

A short-term alternative if campus computer networks are down would be to work elsewhere (e.g. home). A short-term alternative if campus libraries are closed would be to use other libraries (even if travel were required – see action items below). It is anticipated that individual faculty and graduate students would devise their own best (temporary) solutions.

- ◆ Staff: How to perform this function if faculty/staff absenteeism averages 50% for two months (e.g. during pandemic flu):

 Affected research projects might have to delay their schedules. Substitutes are generally not feasible for faculty & graduate students engaged in research.
- ♦ Unique skills: Are there any personnel with unique skills, knowledge, or files whose absence would create difficulty? See "staff" section above. Research skills are not easily replaced.
- ◆ Working at home: Can this critical function be performed with some (or all) staff working from home? What equipment, supplies, and arrangements would be needed?

- --- Faculty & staff & students can work from home if their computers are adequate & if they have broadband connections (cable, DSL). Some staff currently work from home. We use Windows Remote Desktop.
- --- Support from our IT staff would be necessary to iron out problems.
- ◆ Data networks: How to perform this function if computer networks are not available:

Faculty could conduct their research projects in whatever fashion possible. It is anticipated that individual faculty and graduate students would devise their own best (temporary) solutions.

- ◆ Show Stoppers (resources that cannot be replaced, substituted, or done without): Computer networks and libraries (except for short-term).
- ♦ Campus closure: If campus closure were declared, would it be POSSIBLE to stop doing this critical function for a month or two?

Yes

- ◆ Comment:
 - --- Professors would typically continue their research in any fashion possible. Few faculty would see themselves as "shut down."
 - --- If MV California is at sea, preferred strategy might be to NOT shut down that research expedition, unless the flu appeared on board.
- ◆Risks generated by using alternate procedures:

If research projects are unable to continue for extended periods of time, funding could be threatened by lack-of-performance. To control this risk, communication with granting agencies should be established ASAP after the crisis hits.

- ◆ Policy exceptions needed for alternate procedures (& who can grant these exceptions):

 Granting agencies might be asked to alter/waive conditions of grants to allow recovery periods.
- ◆ Timing: when must this function restart, to enable the campus to meet its 30-day goal for restarting teaching and research?

 30 days post-disaster (simultaneous with teaching/research)
- ◆ Additional vulnerabilities (other things that could prevent continuing this function, or restarting it on time):

 None.

◆ Records that will be vital for restarting this function:

	or rectaining time terrotrem
Name of Records:	Grant documents / project records
Medium:	More than one
Owner:	Other dept. or school is owner
Location:	Sponsored Projects Office and Extramural Funds Acctg hold the primary records.
Backup details:	6
Comment:	Electronic records are backed up & recoverable. Paper documents (eg vendor invoices) are not.

◆Consequences: if this function is not restarted on time, these harmful consequences might result:

Possible Harmful Consequence	How lor			saster n occur?		Comment?	
	0-2 days	1 wk	2 wks	3 wks	4 wks	>4 wks	
Disruption of teaching							
Disruption of research	Х						
Loss of faculty							
Loss of staff							
Loss of students							
Well-being of faculty/staff	Х						
Well-being of students							
Payment deadlines unmet by campus							
Loss of revenue to campus							Possible loss of grant funding.
Legal obligations unmet by campus							
Legal harm to university							

Impact on other campus unit(s)				
Impact on important business partner(s)				We have several corporate research partners.
Other				

◆ Key Documents: See Appendix.

Critical Function #3: Payroll

Description of this critical function:

Processing of payroll information for all departmental personnel (campus has central payroll system to which departmental payroll assistant submits information).

◆ Section or unit that performs this function (if applicable):

Departmental Business Office

◆ Responsible person(s):

Mary Jones, MSO

Harry Chan, Payroll Assistant

◆ Upstream dependencies (units or systems whose failure-to-perform will affect us):

Central IT (all payroll systems are web-based).

◆ Downstream dependencies (units or systems that will be affected by our failure-to-perform):

Central Payroll

Faculty & staff who might receive incorrect (or no) paychecks.

◆Peak periods: Comment on peak periods

No peak periods. Load is somewhat lighter in summer due to fewer student employees.

- ◆ Space: How to perform this function if the usual space is not available:
 - --- We will depend on the Campus to handle space issues.
 - --- If Campus does not quickly provide alternate space, MSO will arrange alternate location for payroll assistant to work (telecommute if possible).
 - --- In the event that departmental payroll processing cannot be done in a timely fashion, campus Central Payroll has committed to re-issuing the former period's payroll checks to all personnel (then making corrections later).
- ◆ Equipment: How to perform this function if the usual equipment is not available:

The equipment needed for the payroll function are

- --- a computer for the payroll assistant (plus network connection)
- --- staff personnel files (paper).

If computer or network are not available, Central Payroll has committed to furnish (paper) data-gathering forms to all departments for manual submission of payroll changes. If staff personnel folders are not available, payroll information contained therein is available from on-line Campus HR Information System whenever networks are restored. For personnel for whom a repeat of last period's paycheck would not suffice (e.g. new employees), Central Payroll has committed to manual production of checks (though a time delay on manually-cut checks would probably occur).

- ◆ Staff: How to perform this function if faculty/staff absenteeism averages 50% for two months (e.g. during pandemic flu):

 At present, the payroll assistant (Harry Chan) is the only person trained in payroll issues. Two other staff will be cross-trained (see action item later).
- ◆ Unique skills: Are there any personnel with unique skills, knowledge, or files whose absence would create difficulty? See commentary about cross-training above.
- ◆ Working at home: Can this critical function be performed with some (or all) staff working from home? What equipment, supplies, and arrangements would be needed?
 - --- Staff can work from home if their computers are adequate & if they have broadband connections (cable, DSL). Some staff currently work from home. We use Windows Remote Desktop.
 - --- Support from our IT staff would be necessary to iron out problems.
- Data networks: How to perform this function if computer networks are not available:

If computer networks are not available, Central Payroll has committed to furnish (paper) data-gathering forms to all departments for manual submission of payroll changes.

Show Stoppers (resources that cannot be replaced, substituted, or done without):
 No.

♦ Campus closure: If campus closure were declared, would it be POSSIBLE to stop doing this critical function for a month or two?

No

◆ Comment:

We would have to ensure that paychecks keep flowing. Work-from-home by our payroll assistant or his backup would help, and Central Payroll would have to do its part.

- ◆Risks generated by using alternate procedures:
 - Risk of delayed paychecks. Central Payroll states that worst case would be a 2 week delay.
- ◆ Policy exceptions needed for alternate procedures (& who can grant these exceptions):

 No policy exceptions at department level. Central Payroll will obtain any needed exceptions at its level.
- ◆ Timing: when must this function restart, to enable the campus to meet its 30-day goal for restarting teaching and research?

 10 days post-disaster
- ◆ Additional vulnerabilities (other things that could prevent continuing this function, or restarting it on time):
 - --- Failure of Central Payroll
 - --- Prolonged absence of both payroll assistant and backup substitutes.
- ◆ Records that will be vital for restarting this function:

Managar of Dagaranda	Staff personnel files
Name of Records:	Stan personner mes
Medium:	Paper
Owner:	My own dept or school owns these records
Location:	Higgins 455
Backup details:	2
Comment:	Kept in locked cabinet.

◆ Consequences: if this function is not restarted on time, these harmful consequences might result:

Possible Harmful Consequence	How long after the disaster might this harm begin to occur?						Comment?
	0-2 days	1 wk	2 wks	3 wks	4 wks	>4 wks	
Disruption of teaching							
Disruption of research							
Loss of faculty							
Loss of staff							
Loss of students							
Well-being of faculty/staff		Х					
Well-being of students		Х					student employees
Payment deadlines unmet by campus		Х					
Loss of revenue to campus							
Legal obligations unmet by campus		Х					
Legal harm to university							
Impact on other campus unit(s)							
Impact on important business partner(s)							
Other							

◆ Key Documents: See Appendix.

Critical Function #4: Purchasing

Description of this critical function:

Procuring all departmental supplies & equipment. Department purchasing assistant uses one of three processes to make a purchase:

--- Campus purchasing card (BluCard).

--- Purchase Order created by purchasing assistant within Berkeley Financial System (BFS).

- --- Purchase Requisition created by created by purchasing assistant within Berkeley Financial System (BFS) as a request to Central Purchasing.
- ◆ Section or unit that performs this function (if applicable):

Departmental Business Office

◆ Responsible person(s):

Mary Jones, MSO

George Rudzinski, Purchasing Assistant

◆ Upstream dependencies (units or systems whose failure-to-perform will affect us):

Central Purchasing

Berkeley Financial System (BFS)

External vendors

◆ Downstream dependencies (units or systems that will be affected by our failure-to-perform):

Faculty, staff, students in Department of Deep Sea Studies

◆ Peak periods: Comment on peak periods

There is usually a May-June peak load in purchasing due to end-of-fiscal-year

May, June, deadline.

◆ Space: How to perform this function if the usual space is not available:

--- We will depend on the Campus to handle space issues

- --- If Campus does not quickly provide alternate space, MSO will arrange alternate location for purchasing assistant to work (telecommute if possible).
- ◆ Equipment: How to perform this function if the usual equipment is not available:

The equipment most necessary for purchasing are

- --- Computer for purchasing assistant
- --- Phone for purchasing assistant
- --- BluCard

All three are very important. In the short term, a phone and BluCard would suffice for most purchases (see below).

- ◆ Staff: How to perform this function if faculty/staff absenteeism averages 50% for two months (e.g. during pandemic flu):
 - --- At present, the purchasing assistant (George Rudzinski) is the only person trained in purchasing issues. Two other staff will be cross-trained (see action item later).
 - --- At present, only George has a BluCard (a BluCard is assigned only to an individual). An additional BluCard should be obtained for one of the cross-trained staff members, plus one card for the MSO.
- ◆ Unique skills: Are there any personnel with unique skills, knowledge, or files whose absence would create difficulty? See commentary about cross-training above.
- ◆ Working at home: Can this critical function be performed with some (or all) staff working from home? What equipment, supplies, and arrangements would be needed?
 - --- Staff can work from home if their computers are adequate & if they have broadband connections (cable, DSL). Some staff currently work from home. We use Windows Remote Desktop.
 - --- Support from our IT staff would be necessary to iron out problems.
- ◆ Data networks: How to perform this function if computer networks are not available:

Use BluCard for purchases until networks are re-established. Will require increased upper limit on BluCards (see action item below).

- Show Stoppers (resources that cannot be replaced, substituted, or done without): Phone for purchasing assistant.
- ◆ Campus closure: If campus closure were declared, would it be POSSIBLE to stop doing this critical function for a month or two?

Yes

♦ Comment:

It is possible, but could seriously hinder research. Better alternative would be to have purchasing assistant work from home.

◆ Risks generated by using alternate procedures:

Risk of BluCard abuse if upper limit is raised. Control this by requiring MSO to authorize purchases in advance if possible.

◆ Policy exceptions needed for alternate procedures (& who can grant these exceptions):

Raise limit on BluCards. Lift restricted-item rules on BluCards. These exceptions need approval by Controller and by Central Procurement.

- ◆ Timing: when must this function restart, to enable the campus to meet its 30-day goal for restarting teaching and research?

 15 days post-disaster
- ◆Additional vulnerabilities (other things that could prevent continuing this function, or restarting it on time):
 No.

◆ Records that will be vital for restarting this function:

Name of Records:	Departmental BluCard Log
Medium:	Paper
Owner:	My own dept or school owns these records
Location:	Higgins 455
Backup details:	3
Comment:	

◆ Consequences: if this function is not restarted on time, these harmful consequences might result:

Possible Harmful Consequence	How lor			saster m occur?		Comment?	
	0-2 days	1 wk	2 wks	3 wks	4 wks	>4 wks	
Disruption of teaching					X		
Disruption of research					X		
Loss of faculty							
Loss of staff							
Loss of students							
Well-being of faculty/staff	Х						
Well-being of students	Х						
Payment deadlines unmet by campus					Х		Inability to pay vendors.
Loss of revenue to campus							
Legal obligations unmet by campus					X		Inability to pay vendors.
Legal harm to university							
Impact on other campus unit(s)							
Impact on important business partner(s)					х		Inablity to pay vendors.
Other							

◆ Key Documents: See Appendix.

Critical Function #5: Donor relations

Description of this critical function:

Over the past decade, the Department of Deep Sea Studies has benefited significantly from the interest shown by two donors. Both benefactors (an individual and a family foundation) continue to express active interest in Departmental affairs, and in continuing their financial support. It is important to keep them informed and engaged in departmental activities.

- ◆ Section or unit that performs this function (if applicable): Chair's Office
- ◆ Responsible person(s):

Chair of Department (Jane Diaz)

- Upstream dependencies (units or systems whose failure-to-perform will affect us):
 None
- ◆ Downstream dependencies (units or systems that will be affected by our failure-to-perform):

 Department of Deep Sea Studies

◆ Peak periods: Comment on peak periods

No peak periods.

Space: How to perform this function if the usual space is not available: Not an issue.

- ◆ Equipment: How to perform this function if the usual equipment is not available: Not an issue.
- ◆ Staff: How to perform this function if faculty/staff absenteeism averages 50% for two months (e.g. during pandemic flu): If Chair cannot maintain communication with donors, she will assign a senior faculty member to do so.
- ◆ Unique skills: Are there any personnel with unique skills, knowledge, or files whose absence would create difficulty?

 Not an issue.
- ◆ Working at home: Can this critical function be performed with some (or all) staff working from home? What equipment, supplies, and arrangements would be needed?

Yes. Telephone or email is sufficient.

- ◆ Data networks: How to perform this function if computer networks are not available: Telephone.
- ◆ Show Stoppers (resources that cannot be replaced, substituted, or done without):

 No.
- ◆ Campus closure: If campus closure were declared, would it be POSSIBLE to stop doing this critical function for a month or two?

No

◆ Comment:

There would be no reason to cease contact with donors.

◆Risks generated by using alternate procedures:

No.

- ◆Policy exceptions needed for alternate procedures (& who can grant these exceptions): None.
- ◆ Timing: when must this function restart, to enable the campus to meet its 30-day goal for restarting teaching and research?

 Not needed for restarting teaching or research, but will be critical later on
- ◆Additional vulnerabilities (other things that could prevent continuing this function, or restarting it on time):
 No.

◆ Records that will be vital for restarting this function:

Name of Records:	None.
Medium:	
Owner:	
Location:	
Backup details:	
Comment:	

◆ Consequences: if this function is not restarted on time, these harmful consequences might result:

neequenees. If the function is not restained on time, these named consequences might restain.							
Bassible Harmaful Canasanuana	How lor	How long after the disaster might this harm begin to occur?					Commont?
Possible Harmful Consequence			begin to	occur:	•		Comment?
	0-2 days	1 wk	2 wks	3 wks	4 wks	>4 wks	
Disruption of teaching							
Disruption of research							
Loss of faculty							
Loss of staff							

Loss of students				
Well-being of faculty/staff				
Well-being of students				
Payment deadlines unmet by campus				
Loss of revenue to campus			Х	Benefactors are very important stakeholders.
Legal obligations unmet by campus				
Legal harm to university				
Impact on other campus unit(s)				
Impact on important business partner(s)				
Other				

♦ Key Documents: See Appendix.

3B. INFORMATION TECHNOLOGY

Contents

- (1) Recovery Details for Applications
- (2) Recovery Details for Servers
- (3) Backup of Workstations
- (4) IT Strategies

(1) Recovery Details for Applications (that support critical functions)

◆ Application # 1

Name of application	Departmental Student Roster & Database
Туре	Desktop
Functional owner	Dept of Deep Sea Studies
Technical owner	Dept of Deep Sea Studies
Technical expert	Sally Robertson
Person responsible for recovery	Sally Robertson
Is this a database application?	Yes
Does this application move data to-or-from core campus systems?	No
If so, what systems?	
Depts. impacted by failure of this application	our own department
Backup frequency	Daily
Backup medium	Other
Backup auto or manual?	Automatic
Onsite storage at	
Offsite storage at	Iron Mountain, Sacramento
Offsite storage frequency	Weekly
Installation disks & documentation at	Higgins 372
Successful recovery been done?	Yes
Comment	Backed up to network server that is co-located in Campus Data Center.

◆ Application # 2

Name of application	Departmental Faculty Roster & Database
Туре	Desktop
Functional owner	Dept of Deep Sea Studies
Technical owner	Dept of Deep Sea Studies
Technical expert	Sally Robertson
Person responsible for recovery	Sally Robertson
Is this a database application?	Yes
Does this application move data to-or-from core campus systems?	No
If so, what systems?	
Depts. impacted by failure of this application	our own department
Backup frequency	Daily

Backup medium	Other
Backup auto or manual?	Automatic
Onsite storage at	
Offsite storage at	Iron Mountain, Sacramento
Offsite storage frequency	Weekly
Installation disks & documentation at	Higgins 372
Successful recovery been done?	Yes
Comment	Backed up to network server that is co-located in Campus Data Center.

◆ Application # 3

Name of application	Departmental BluCard Log
Туре	Desktop
Functional owner	Dept of Deep Sea Studies
Technical owner	Dept of Deep Sea Studies
Technical expert	Jake McGuirk
Person responsible for recovery	Jake McGuirk
Is this a database application?	No
Does this application move data to-or-from core campus systems?	No
If so, what systems?	
Depts. impacted by failure of this application	our own department
Backup frequency	Daily
Backup medium	Other
Backup auto or manual?	Automatic
Onsite storage at	
Offsite storage at	Iron Mountain, Sacramento
Offsite storage frequency	Weekly
Installation disks & documentation at	Higgins 372
Successful recovery been done?	Yes
Comment	This is simply an Excel file, manually updated. Nightly backup to Campus Data Center via UCBackup.

◆ Application # 4

Name of application	SeaMapper	
Туре	Client-Server Application	
Functional owner	Dept of Deep Sea Studies	
Technical owner	Dept of Deep Sea Studies	
Technical expert	Helen Jefferson	
Person responsible for recovery	Helen Jefferson	
Is this a database application?	Yes	
Does this application move data to-or-from core campus systems?	No	
If so, what systems?		
Depts. impacted by failure of this application	Us Coast Guard US Navy NOAA	
Backup frequency	Daily	
Backup medium	Other	
Backup auto or manual?	Automatic	
Onsite storage at		

Offsite storage at	Iron Mountain, Sacramento
Offsite storage frequency	Weekly
Installation disks & documentation at	Higgins 372
Successful recovery been done?	Yes
Comment	This is a seafloor mapping application used by our dept. as well as by government partners. Major source of funding for department projects. Extremely critical, pace-setting application in this field.

(2) Recovery Details for Servers

♦ Server # 1

Name of server	Trident
Туре	File server
Explanation	dept. file server
Server software	Windows Server 2003
Technical expert	James Nguyen
Person responsible for recovery	James Nguyen
Applications impacted by failure of this server	All dept. desktop applications
Depts. impacted by failure of this server	our own dept.
Backup frequency	Daily
Backup media	Other (describe)
Backup auto or manual?	Automatic
Onsite storage at	
Offsite storage at	Iron Mountain
Offsite storage frequency	Weekly
Installation disks & documentation at	Higgins 372
Successful recovery been done?	Partial
Comment	Backup is to Campus Data Center via UCBackup.

♦ Server # 2

Name of server	Neptune
Туре	Web server
Explanation	Runs both dept. and faculty websites plus various instructional applications used in courses.
Server software	Windows Server 2003 SQL Server 2003
Technical expert	Jerry Winsley
Person responsible for recovery	Jerry Winsley
Applications impacted by failure of this server	All instructional applications used in undergraduate courses.
Depts. impacted by failure of this server	our own department
Backup frequency	Daily
Backup media	Remote backup server
Backup auto or manual?	Automatic
Onsite storage at	
Offsite storage at	Iron Mountain, Sacramento
Offsite storage frequency	Weekly
Installation disks & documentation at	Higgins 372

Successful recovery been done?	No
Comment	

♦ Server # 3

Name of server	Poseidon
Туре	Web server
Explanation	student web sites
Server software	Windows Server 2003 SQL Server 2003
Technical expert	Carol Brown
Person responsible for recovery	Carol Brown
Applications impacted by failure of this server	student websites
Depts. impacted by failure of this server	our own department
Backup frequency	Daily
Backup media	Local tape
Backup auto or manual?	Automatic
Onsite storage at	Higgins 377
Offsite storage at	None
Offsite storage frequency	No offsite storage
Installation disks & documentation at	Higgins 372
Successful recovery been done?	No
Comment	Backup is to local tape. Considered to be a non-critical server.

♦ Server # 4

Name of server	Charybdis
Туре	Application server
Explanation	Runs critical seafloor mapping application used by government partners.
Server software	Apache / Unix
Technical expert	James Nguyen
Person responsible for recovery	James Nguyen
Applications impacted by failure of this server	SeaMapper
Depts. impacted by failure of this server	Our department US Coast Guard US Navy NOAA several other universities
Backup frequency	Daily
Backup media	Other (describe)
Backup auto or manual?	Automatic
Onsite storage at	Onsite backup server in Higgins 377
Offsite storage at	Iron Mountain
Offsite storage frequency	Weekly
Installation disks & documentation at	Higgins 372
Successful recovery been done?	Yes
Comment	Dual backup onsite backup server in Higgins 377 plus colocated server in Campus Data Center.

(3) Backup of Workstations

Computer users (faculty & staff) in this unit backup their workstations as follows:

ompater accretitating a cian, in the ann sackap their workerations ac renowe.		
Backup method	Percent of users who use this method	Comment
User's files are stored on departmental server, which gets backed up	95%	
UCBackup (by Central Computing Services)		
Local backup of workstation by user (automatic)		
Local backup of workstation by user (manual)		
Other		
No backup		
Don't know	5%	One professor on sabbatical - will check on her return.

◆ Workstation support is performed by:

Comment

Technicians employed by department

Dept of Deep Sea Studies, IT Support Group

External vendor

DataReal Corp. used occasionally when dept. IT staff

are overloaded.

(4) IT Strategies

◆ Purchasing: How to purchase new hardware quickly:

If campus Procurement Dept. is functioning, purchase through them to get campus special pricing. If not, buy direct from manufacturer via web or phone. (IBM/Lenovo is preferred vendor, Dell & HP also OK) (ask for higher-education pricing).

◆ Disks & documentation: Location of software & documentation that will be needed by technicians to rebuild workstations and servers:

Higgins 372

- ◆ Special environmental needs for IT equipment:
 - Server room needs air conditioning.
- ◆ Technical staff: Will your technical support staff be adequate in numbers & skills to rebuild your systems quickly? If not, what to do?

Have 5 programmer/analysts plus manager. If entire Deep Sea Studies Dept. had to relocate to new quarters, could take 1-2 weeks to rebuild all desktops & servers (after new hardware arrives). Worse if any of the IT team is not here. Possible solutions: outside vendor / temporary hire / borrow staff from other dept. or from sister campus.

- Obstacles: Potential obstacles that could hinder the quick re-establishment of critical IT services:
 - --- Inability to purchase new hardware quickly.
 - --- Inability to obtain additional IT support technicians.
 - --- Need Central IT to re-establish central campus networks & applications.
- ♦ Work from home: IT strategies that will enable & support users to work from home (e.g. during pandemic, or post-earthquake):

This depends what level of support the Dept. wants us to offer. To offer full support to all faculty/staff would require travelling to some of their homes to troubleshoot problems (in violation of contagion-avoidance policy!) Phone support is more do-able. Best strategy would be to set up key users NOW, encourage some telecommuting to keep the work-from-home arrangement working, and that way we enter the crisis with a working system.

- Systems that lack workarounds: Systems or applications that could NOT be replaced temporarily by "workarounds":
 - --- The SeaMap application certainly has no workaround. Conceivably, we could get it running at a remote site if one were offered.
 - --- Administrative applications & files can generally be worked-around.
 - --- The instructional applications that we support would generally have no workarounds. Faculty would have to adapt their pedagogy in order to temporarily teach without these.

3C. FACULTY PREPAREDNESS

Departmental plan to promote faculty preparedness:

◆ Do the previous sections of this plan (Critical Functions and Information Technology) contain Action Items related to the preparedness of individual faculty?

Yes.

- ◆ Comment?
- ◆ Are there any other Action Items you would like to add?

Action Item:	Request faculty committee to develop strategy for secure storage of non-electronic research
Action item.	materials.

3D. KEY PEOPLE AND RESOURCES

Contents

- (1) Communication Resources
- (2) Working from Home
- (3) Key Staff
- (4) Key Staff of Other Campus Units
- (5) Key Off-Campus Partners
- (6) Key Vendors
- (7) Key Others
- (8) Office & IT Equipment
- (9) Other Equipment
- (10) Supplies (Consumables)
- (11) Facilities
- (12) Other Resources

(1) Communication Resources:

Resource:	Emergency home contact list (faculty & staff)
Question:	Who keeps printed copies?
Description:	Staff emergency contact list
Who:	all central office staff
Location:	home & office
Comment:	

Resource:	Emergency home contact list (faculty & staff)
Question:	Who keeps printed copies?
Description:	Faculty emergency contact list
Who:	Chair, MSO, all faculty
Location:	home & office
Comment:	

Resource:	Emergency home contact list (faculty & staff)			
Question:	Who maintains it?			
Description:	Faculty emergency contact list			
Who:	Alicia Torres			
Location:	Higgins Hall 452			
Comment:	updated each semester			

Resource:	Emergency home contact list (faculty & staff)
Question:	Who maintains it?
Description:	Staff emergency contact list
Who:	Jared Chen
Location:	Rogers Hall 125
Comment:	updated immediately with each staff change

Resource:	Important email lists
Question:	Who holds these?

Description:	donor list				
Who:	Jane Gallegos				
Location:	Higgins 357				
Comment:					
Resource:	Important email lists				
Question:	Who holds these?				
Description:	student email list				
Who:	Jane Gallegos				
Location:	Higgins 357				
Comment:					
Resource:	Lists of students				
Question:	Who holds these?				
•	Student Roster				
Description: Who:	Irene Watanabe				
Location:	Undergrad. Advising Office				
	also can be printed from database by any staff				
Comment:	also can be printed from database by any stan				
Resource:	Passwords used by several people (e.g. department email account)				
Question:	What are these and who knows them?				
Description:	all shared passwords				
Who:	all central office staff				
Location:	Higgins 357 - in "Office Affairs" folder				
Comment:	kept up to date by MSO				
Resource:	Passwords used by student-employees				
Question:	What are these and who knows them in case the student is not available?				
Description:	student passwords				
Who:	several student employees				
Location:	Higgins 357 - in "Office Affairs" folder				
Comment:	these passwords are changed frequently due to high turnover of student employees				
Resource:	Recorded message on department phone line(s)				
Question:	Who has access & knowledge to record these?				
Description:	both incoming lines 2-5693 and 2-5694				
Who:	any member of central office staff				
Location:	Higgins 357				
Comment:	password is in "Office Affairs" folder				
Resource:	Message posted on departmental web sites				
Question:	Who has access & skills to post these?				
Description:					
Who:	Tran Vuong, Sue Lincoln, Jack Guerrero				
Location:	Roberts 129				
Comment:	web support staff				
Resource:	Text-messaging				
Question:	Which faculty and staff do text-messaging on their cell phones?				
Description:	text-messaging				
Who:	not known at present				
Location:					
Comment:	we will investigate this				
Pagauras:	PeopleLocator web tool				
Resource:	Leohierocatoi men tooi				

Question:	Are your faculty & staff aware of this emergency communication tool and how to access?
Description:	PeopleLocator
Who:	all faculty & staff have been given info
Location:	
Comment:	URL of PeopleLocator is posted on dept website

Resource:	Other communication issue (describe)
Question:	
Description:	communication while travelling
Who:	all faculty & staff
Location:	
Comment:	MSO asks all faculty/staff to leave contact info with her when travelling.

(2) Working From Home:

				Currently	Currently	
				uses	uses	
		l	Currently	campus	campus	
		Home	has ,	fileservers	database	
		computer	broadband	from	applications	_
Name	Position	adequate?	connection?	home?	from home?	Comment
Cathy	Foculty	Drobobly	Drobobly	Drobobly	Probably	Will check when she returns from
Wilson	Faculty	Probably	Probably	Probably	not	sabbatical.
Irene	Staff	Yes	Yes	Yes	Yes	Irene telecommutes regularly.
Watanabe						<u> </u>
James Scott	Faculty	Yes	Yes	Yes	Yes	
Jorge Escobar	Staff	No	No	No	No	Jorge is payroll backup - we should get him enabled to work from home.
Wilma Gutteriez	Faculty	Yes	Yes	Yes	Probably	

(3) Key Staff:

Jorge Escobar
Admin. Specialist
payroll backup, also has web skills
Josephine Casteneda
Chair
former provost
Mary Jones
MSO
Harry Chan
Payroll Assistant
long-term staff member, knows most business functions
Jerry Sanchez
IT Manager

Special skill	
Comment	Jerry is our main contact with campus central computing.
Maria	Sugan Chang
Name	Susan Chang
Title or function	Professor
Special skill	
Comment	senior faculty member

(4) Key Staff of Other Campus Units:

Name	Steve Brown
Department	Information Systems & Technology (IST)
Work address	318 Banway Bldg
Work phone	510-123-3456
Work cell phone	510-123-3456
Fax	510-123-3456
Email	abc@berkeley.edu
Comment	expert on student database
Name	Sara Cheung
Department	College of Letters & Science
Work address	206 Cameron Hall
Work phone	510-123-3456
Work cell phone	510-123-3456
Fax	510-123-3456
Email	abc@berkeley.edu
Comment	HR Manager

(5) Key Off-Campus Partners:

Name	Alice El-Baradei
Organization	California State University
Work address	123 Smith Blvd. San Francisco, CA 12345
Work phone	510-123-3456
Work cell phone	510-123-3456
Fax	510-123-3456
Email	aeb@abc.edu
Comment	partner in several ongoing research projects
Name	Raymond Sanford
Organization	Undersea Foundation
Work address	6509 Delaware St. Cleveland, Ohio 34567
Work phone	438-123-4567
Work cell phone	438-123-4567
Fax	438-123-4567
Email	abc@abc.org
Comment	grantor for several projects

(6) Key Vendors:

Name	Stephanie Shabazz
Organization	Xerox
Work address	672 Broadway Oakland, CA

Work phone	510-123-3456
Work cell phoneh	510-123-3456
Fax	510-123-3456
Email	abc@abc.com
Comment	for maintenance & repairs of dept. copier
Alternate Vendor(s)	yes - GTP Office Services, Albany, CA.
Name	Tomas Rodriguez
Organization	WaterSoft, Inc.
Work address	42 Yardley Terrace Atlanta, GA 44367
Work phone	227-123-4567
Work cell phoneh	227-123-4567
Fax	227-123-4567
Email	abc@abc.com
Comment	vendor of specialized oceanographic software, also has office in Toronto, Canada
Alternate Vendor(s)	no easy substitutes - unique product, industry leader

(7) Key Others: (donors, stakeholders, clients, customers - UCB or external) who may need to be contacted of kept informed

Name	Henry Nguyen
Organization	Nguyen Securities, Inc.
Work address	34 Wall St. NY, NY 10047
Work phone	212-123-4567
Work cell phone	212-123-4567
Fax	212-123-4567
Email	abc@abc.com
Comment	graduate, and benefactor of Dept. of Deep Sea Studies
Name	Teresa Chu
Organization	Acme Holdings, Inc.
Work address	45 Holden Way Redlands, CA 34278
Work phone	475-123-4567
Work cell phone	475-123-4567
Fax	475-123-4567
Email	abc@abc.com
Comment	benefactor

(8) Office & IT Equipment:

Listed here are SOME items that will be needed to resume all of the critical functions in this plan:

Minimum No. Required	Comment		
27	one per FTE, including faculty		
16	for key staff - faculty have their own		
27			
4	3 for Higgins Hall 1 for Rogers Hall		
1			
1			
0			
	No. Required 27 16 27 4 1		

Server	6	

(9) Other Equipment: (EXCLUDING classroom equipment, lab equipment, and consumables)

Dept. pickup truck is needed to prepare the research ship (MV California) for expeditions.

(10) Supplies (Consumables): (including inventory strategy)

Mainly office supplies. We keep a 2-week inventory but plan to increase that to 6 weeks.

(11) Facilities: (special space or facilities needs that are in addition to office-classroom-lab needs)

Loading dock for bulky/heavy equipment related to our ocean research expeditions.

(12) Other Resources: (that will be needed to resume critical functions)

No.

APPENDIX

List of Key Documents

Name of Document	Owner	Location(s) of Printed Copies	Digital Copy in BCPT?	Comment
Current course list	Susan Brown	234 Higgins Hall	Yes	Reconstruct from Registrar's Office if necessary.
Current list of funded research projects	Harriette Madison	238 Higgins Hall	Yes	
Current list of pending grant applications	Harriette Madison	238 Higgins Hall	Yes	
Payroll Procedures & Guidelines - Dept. of Deep Sea Studies	Harry Chan	Higgins Hall 455	Yes	Very clear set of instructions for processing payroll.
Purchasing Procedures & Guidelines - Dept. of Deep Sea Studies	George Rudzinski	Higgins 455	Yes	Very clear set of guidelines.