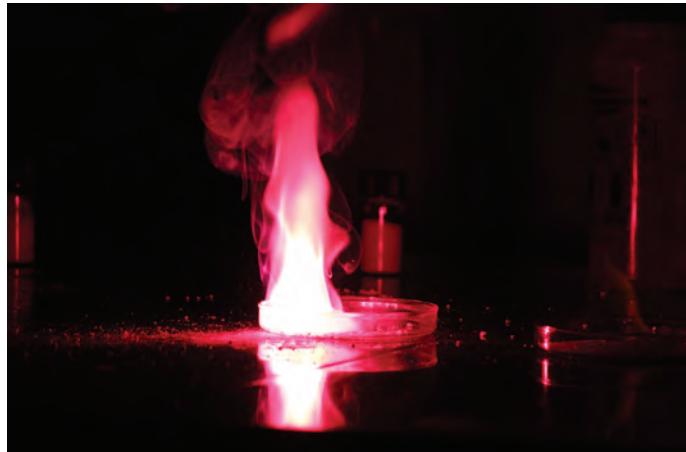


# Safety Procedures Manual



Physics  
Northern Illinois University

# TABLE OF CONTENTS

Table of Contents.....	1
Contingency Plan (NIU Faraday Hall/La Tourette Hall Complex)	
General Information.....	2
Emergency Coordinator and Alternates.....	2
Criteria for Implementation of the Contingency Plan.....	3
Emergency Response Procedures .....	3
Emergency Contact Numbers .....	3
Evacuation of the Complex.....	4
Lab Safety Guidelines.....	6
Procedures for Responding to Health Emergencies.....	7
Procedures for Chemical Storage, Disposal, and Collection .....	7
Chemical and Chemical Waste Disposal Guidelines .....	7
Biological Waste Disposal Guidelines.....	9
Radiation Waste Disposal Guidelines.....	9
Procedures for Response to Small Chemical Spills in the Faraday Hall/La Tourette Hall Complex .....	10
Procedures for the Faraday Hall/La Tourette Hall Complex	
In the Event of Tornado or other Severe Weather .....	10
Weather Safety.....	10
Tornado Safety Rules.....	11
Flash Floods.....	12
Other Weather Safety Concerns.....	12
Location of Emergency and Communications Equipment	
Faraday Hall.....	13
La Tourette Hall.....	17
Primary Evacuation Routes	
Faraday Hall.....	21
La Tourette Hall.....	25
Location of the Faraday Hall/La Tourette Hall Complex on the Northern Illinois University Campus.....	29

# CONTINGENCY PLAN

FARADAY HALL/LA TOURETTE HALL COMPLEX  
NORTHERN ILLINOIS UNIVERSITY

## GENERAL INFORMATION

This contingency plan is for the Faraday Hall/La Tourette Hall complex, located on the east campus of Northern Illinois University. Page 32 shows the location of these buildings on the NIU campus. The Faraday Hall/La Tourette Hall complex serves as a repository for chemicals used by the teaching and research activities carried out in the Department of Physics.

## EMERGENCY COORDINATOR AND ALTERNATES

A listing of the emergency coordinator and alternates is presented in the table below. In case of fire or chemical discharge in the complex, the primary emergency coordinator is to be contacted. If the primary emergency coordinator cannot be reached, an alternate emergency coordinator is to be contacted.

### *Emergency Coordinator and Alternates*

Name	Position	Address	Phone
<b>Greg Fagerberg</b> Laboratory Manager	Alternate	La Tourette Hall 202A	(815) 753-1953
<b>Laurence Lurio</b> Department Chair	Alternate	La Tourette Hall 202D	(815) 753-6470 (815) 260-4900
<b>Michele Crase</b> Biological Safety Specialist	Emergency Coordinator	Faraday Building	(815) 753-9251 (W) (815) 751-9251 (M)
<b>Jim Gable</b> Chemical Safety Specialist	Emergency Coordinator	Dorland Building	(815) 753-1610 (W) (815) 332-4081 (H) (815) 751-1934 (M)
<b>Scott Mooberry</b> Acting Director of Environmental Health and Safety	Emergency Coordinator	Dorland Building	(815) 753-6250 (W) (815) 739-2375 (M)

### *Radioisotope Spill or Release/X-Ray, Laser Emergency:*

<b>Michele Crase</b> Biological Safety Specialist	Emergency Coordinator	Faraday Building	(815) 753-9251(W) (815) 751-9251(M) (815) 753-1610(H)
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# **CRITERIA FOR IMPLEMENTATION OF THE CONTINGENCY PLAN**

The contingency plan will be implemented if one or more of the following emergency events occurs:

1. Uncontrolled fire, or in the event that the installed fire suppression equipment is needed to control a fire;
2. Chemical spills or releases which cannot be contained. For spills and releases, the following general guidelines will be used:

<i>Hazard Characteristic of Spilled Materials</i>	<i>EPA Hazardous Waste Number</i>	<i>Amount of Spill Needed to Implement the Contingency Plan</i>
Ignitable	D001	4 Liters
Corrosive	D002	10 Liters
Reactive	D003	100 Grams mg to kg
Toxic	D004-17	1 depending on degree of toxicity

3. Explosion or threat of explosion;
4. An injury requiring emergency action beyond first aid;
5. Any other condition resulting from the management of hazardous waste that threatens human health and/or the environment; or
6. Radioisotope spill or release.

## **EMERGENCY RESPONSE PROCEDURES**

Emergency response consists of the following actions:

**Notification.** Notification to evacuate the complex will be given by voice command and/or by the fire alarm. On-site personnel will phone emergency response agencies and the emergency coordinator, using the emergency contact numbers listed below and in the table on page 2.

### ***Emergency Contact Numbers***

<i>Contact Name</i>	<i>Telephone Number</i>
NIU Public Safety/DeKalb Fire Department .....	911
Poison Control Center.....	(800) 222-1222
East Heating Plant.....	753-1151
Campus Emergency Information .....	<a href="http://www.niu.edu/emergencyinfo">www.niu.edu/emergencyinfo</a>

***Identification of Hazardous Materials.*** The emergency coordinator will identify the character, source, amount, and extent of any material released from or within the complex.

***Hazard Assessment.*** The emergency coordinator will assess possible hazards to human health and the environment, and the possible direct and indirect effects of a fire, explosion, spill, or leak (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, heat-induced explosion potentials, or the effects of any surface water runoffs from water or chemical agents to control fires).

***Emergency Equipment.*** A list of emergency equipment and its location is given in Table I (Faraday Hall, pages 12-13), and Table II (La Tourette Hall, pages 14-15). Maps of the complex showing the location of emergency equipment are found on pages 16-23.

## EVACUATION OF THE COMPLEX

Evacuation of the complex is called for in the event of an immediate danger to its occupants, in the case of an emergency situation that does not appear to be contained and under control, and in the case of a confirmed warning or threat (i.e., bomb threats, intruder alerts, etc.).

Announcement of immediate danger and the signal to evacuate can be made by anyone who becomes aware of such a situation within the Faraday Hall/La Tourette Hall complex.

If, for whatever reason, evacuation of the entire complex is deemed necessary, the signal to evacuate will normally be made by voice command and/or by pulling one of the fire alarms in the hallways. This involves all evacuation needs, not just fires.

Actions to be taken in the event of an evacuation order:

1. Cease all work;
2. Shut down/off equipment that may pose/develop into a hazard;
3. Ascertain that all occupants of the office/laboratory and adjacent premises are aware of the evacuation order (i.e., non-English speaking visitors and visitors who are not familiar with the layout of the complex, persons who are deaf and/or physically challenged, etc.);
4. Take keys and leave;
5. Close doors as you exit the lab/office;
6. Exit the building using the nearest stairwell – Do NOT use the elevators;
7. Assist those who are physically challenged and/or are in need of assistance, if it is safe to do so.

All Physics Department persons evacuating the complex are to assemble West of La Tourette Hall in Parking Lot #36 (West side of Normal Rd.) by the Locust Street entrance. Lot #36 is south of Founders Library & North of the NIU Parking Deck.

Once at the common meeting place, all persons present should ascertain that all their colleagues, subordinates, research group members, and/or class students are present. This is to ensure that everyone in the complex is aware of the emergency situation, and to allow for the rapid determination of whether or not there are people who may still be trapped inside the buildings.

Evacuated persons, unless there is an immediate or obvious danger, should remain at the common meeting place until further instructions are given by the emergency coordinator or the DeKalb Fire Department.



**Do not go back into the building  
until the area is cleared by the  
emergency coordinator!!**



***Evacuation Routes.*** Primary evacuation routes start on page 24.

***Decontaminations Procedures.*** In the event that individuals are contaminated with material (chemical, biological, or radiological), decontamination will take place after first aid is obtained.

# LAB SAFETY GUIDELINES

Following these ten simple steps will lead to a safer laboratory. A more concrete set of laboratory safety guidelines can be found in NIU's Chemical Hygiene Plan.

1. Wear appropriate eye protection at all times in the lab and when chemicals are transported.
2. Forbid working alone in any laboratory and working without prior knowledge of a staff member.
3. Provide an ample supply of PPE – safety glasses, gloves, lab coats, goggles, face shields.
4. Require the use of appropriate PPE at all times, when experiments are running and when chemicals are transported.
5. Never allow experiments to run unattended.
6. Forbid eating and drinking in the laboratory. Do not allow food to be stored in chemical refrigerators.
7. Require good housekeeping practices in all work areas; do not use aisles or walk ways as storage areas. Avoid clutter on lab benches and in fume hoods.
8. When conducting experiments with hazards or potential hazards, ask these questions:
  - What are the hazards?
  - What are the worst possible things that could go wrong?
  - How will I deal with them?
  - What are the prudent practices and equipment are necessary to minimize the risk of exposure to the hazards?
9. Require all employees to review the Safety Procedures Manual and Chemical Hygiene Plan. Have a signed statement that they have done so, have understood the contents, and have agreed to follow the procedures and practices. Keep these statements on file.
10. Require every pre-lab or pre-experiment discussion to include consideration of the health and safety aspects.

# PROCEDURES FOR RESPONDING TO HEALTH EMERGENCIES

**Bring AED and First Aid Kit (located at east end of third floor skywalk between Faraday Hall and La Tourette Hall) to the scene of a medical emergency!**

1. Check to make sure the scene is safe.
2. Ask the person, “Are you okay?”
  - a. If person responds, ask “Can I help you?”
  - b. If no response, **call 911**.
3. If no response, but the person is breathing, keep their airway open and check for bleeding (also look for medical information bracelet/necklace). Continue to check for responsiveness.
4. If no response and person is ***not breathing***, provide chest compressions.
  - a. Put your hands in the middle of the chest.
  - b. Give an adult person 100 compressions per minute.

## PROCEDURES FOR CHEMICAL STORAGE, DISPOSAL, AND COLLECTION

1. Label the waste container when you put something in it. Waste containers must be labeled ***in English*** with the amount and type of waste added, and the date.
2. Be careful of possible reactions when adding waste to containers.
3. Don’t put your waste down the sink or anything other than an approved waste container.
4. Waste containers must be resealed after every use. Open waste containers ***ARE NOT*** permitted!

## CHEMICAL AND CHEMICAL WASTE DISPOSAL GUIDELINES

The disposal of hazardous chemicals is strictly regulated under the Resource Conservation and Recovery Act (RCRA), the Illinois Environmental Protection Agency, and EPA regulations (40 CFR 100-399). Chemicals and chemical waste can be disposed of by contacting the storeroom or the Department of Environmental Health & Safety (EH&S). Individuals who do not follow procedures in complying with state and federal regulations are **individually responsible for possible fines and/or imprisonment**. Please consult NIU’s *Hazardous Waste Manual* at

[www.niu.edu/ehs/chemical/hazardouswastemanual.pdf](http://www.niu.edu/ehs/chemical/hazardouswastemanual.pdf) for a complete list of procedures regarding chemical and chemical waste disposal.

**No hazardous chemical or substance shall be disposed of into the sanitary sewage system, into the atmosphere, or into the university trash system!** All chemical waste must be collected in suitable containers for processing and disposal by or under the supervision of the EH&S Chemical Safety Coordinator, Jim Gable (753-1610). In the event of uncertainty, contact the storeroom or EH&S for advice.

Any waste material that may, upon contact, present a hazard to health or the surrounding environment should be treated as a potentially hazardous waste. This includes spent or unused chemicals, cleaning solutions, oils, etc. If there is any doubt whether a material should be treated as hazardous, contact either the storeroom or EH&S (Jim Gable, 753-1610). Never throw any questionable material in the sewer or in the trash without first consulting with the storeroom or EH&S.

***Containers and Labeling:***

Chemicals for disposal must be placed in non-reactive, sealed containers with a screw-type cap. The exterior of the container must be CLEAN. Containers with cracked or corroded caps will not be accepted. These containers must be conspicuously labeled as follows:

- a. “WASTE”, “CHEMICAL WASTE”, or “HAZARDOUS WASTE”
- b. Chemical name(s) and **volumes** or **mass**, written in English. Chemical formulae or symbols are **NOT** acceptable.
- c. Room number, laboratory, or responsible person.
- d. Date container was filled or purchased.

***Empty Containers:***

Empty containers of five (5) gallons or less may be placed in dumpsters if they meet the definition of the RCRA empty container rule. Any container that previously held a hazardous chemical or waste is defined as empty if:

- a. No hazardous materials can be poured, pumped, or drained from the container;
- b. No hazardous materials remain in the container that can be feasibly removed;
- c. The walls of the container must not contain any significant residual materials;
- d. The label is removed or defaced;
- e. The lid is removed; and
- f. The container is placed directly into a dumpster.

If you have a container larger than five (5) gallons, please contact the Chemical Safety Coordinator at 753-1610 for disposal information. Triple rinsing is not required to comply with the RCRA empty container definition.

## **BIOLOGICAL WASTE DISPOSAL GUIDELINES**

Biological waste must be stored in a red plastic bag appropriately marked “Biosafety”. The full bags are brought to the storeroom to be picked up by the waste vendor.

## **RADIATION WASTE DISPOSAL GUIDELINES**

Radiation waste can only be processed by the radiation safety officer. Please contact the storeroom to schedule a pick-up.

## **PROCEDURES FOR RESPONSE TO SMALL CHEMICAL SPILLS IN THE FARADAY HALL/LA TOURETTE HALL COMPLEX**

You may clean up small chemical spills for which you have proper training (Note: if you are unsure on whether or not to clean up the spill, contact an Emergency Coordinator from the list on page 2 of this manual.) For additional information, go to <http://www.niu.edu/ehs/chemical/procedures>.

1. Isolate the spill area.
2. If the spill is a flammable liquid, extinguish all flames and turn off all electrical equipment.
3. Use absorbents found in the spill kit to neutralize and absorb all free liquids.
4. Extra absorbents are located in the storeroom and on the loading dock in Faraday Hall.
5. Place the spill clean-up debris into an appropriate container and label it accordingly.
6. Contact an Emergency Coordinator for further guidance on disposal of waste materials.
7. Never dispose of any spill material in the trash or into the sewer before contacting an Emergency Coordinator.

Spills involving mercury require specialized equipment and training. If any volume of mercury is spilled, isolate the area and immediately contact an Emergency Coordinator from the list on page 2.

# **PROCEDURES FOR THE FARADAY HALL/LA TOURETTE COMPLEX IN THE EVENT OF TORNADO OR OTHER SEVERE WEATHER**

## **WEATHER SAFETY**

When severe weather approaches the NIU campus, the university has several different means of issuing the appropriate warnings: the outdoor siren near the Rec Center, NOAA Weather Radios located in more than 100 offices on campus (including the departmental coffee room and the stock-room in this department), e-mail to subscribers to the watches/warnings list, the NIU Weather homepage (<http://weather.admin.niu.edu/wx.html>), alphanumeric pager, and police or staff notification after any of these other warning methods have been activated.

*The single most important thing to remember when severe weather threatens is:*

***Don't Panic!!***

Stay calm, and react appropriately to the situation that is occurring. If you stay calm, others will. When severe weather is on the way, seconds count – so don't waste any by losing your cool.

## **TORNADO SAFETY RULES**

- Keep alert to changing weather conditions. Know the difference between a tornado *watch* (meaning conditions are favorable for tornado formation) and a tornado warning (meaning that a tornado has already been sighted or detected by radar).
- When you hear a tornado warning or see a funnel cloud, take shelter *immediately!*
- Know where your shelter is before you need it.

*So where do you go when a tornado warning has been issued?*

**ON CAMPUS:** Every academic building on campus has been scouted for the locations offering the most safety when a tornado hits. In the Faraday Hall/La Tourette Hall complex, these locations are the bathrooms on the lowest floor, the inner hallways away from windows, the tunnel between the two buildings, and the stairways leading to the mechanical rooms on the lower level of La Tourette Hall. A complete list of campus tornado shelters is available on the NIU Weather homepage at <http://weather.admin.niu.edu/bldgtorn2.html>.

**IF YOU ARE OUTDOORS:** Get inside a building if at all possible. If no buildings are available or there is no time to get indoors, go to a ditch or other depression in the ground and lie flat, using your arms to protect your neck and head. If you are in a car, drive at *right angles* to the tornado's path. **Do not** attempt to outrun it! If a tornado appears stationary or is growing larger, that usually means it is heading for you. **Do not** take shelter in an underpass!

**IF YOU ARE AT HOME:** Go to the lowest floor in the building and take cover beneath a sturdy workbench, table, or stairway. Stay away from windows. If you do not have a basement, go to an interior bathroom, like down in the bathtub, and cover yourself with a mattress. As a general rule, put as many walls and floors between you and the tornado as you possibly can.

## **FLASH FLOODS**

Some parts of the NIU campus, including the Faraday Hall/La Tourette Hall complex, are situated in flood prone areas. As their name implies, flash floods can strike quickly, even before a warning is issued. If you are in a flood plain or a flood-prone area, and a flash flood warning has been issued, evacuate **immediately** to higher ground. Don't waste time: seconds count!

Stay away from the Kishwaukee River. If it has been raining hard for several hours, this is an indication that flooding is possible, even if an official watch or warning has not been issued. Keep an eye on the river, especially in buildings adjacent to it.

If you are near Watson Creek (the creek which runs south of the Faraday Hall/La Tourette Hall complex), it will likely flood first, before the river itself does. The parking lot behind the Faraday/La Tourette Hall complex has experienced significant flooding on several occasions in recent years. The lower level of La Tourette Hall may flood as well, if water levels are high enough. If you see the creek leaving its banks and flood waters approaching an NIU building, evacuate the area immediately and then call NIU Police. Stay out of flowing water or water the covers roads. Head for higher ground away from the river or Watson Creek, such as the west side of campus.

## **OTHER WEATHER SAFETY CONCERNS**

Other types of weather emergencies (heat advisories, winter storm warnings, extreme cold warnings, etc.) can also affect the NIU campus. For information about these advisories, visit the Severe Weather Safety page at <http://weather.admin.niu.edu/advisory.html>. For a listing of current watches and warnings, and other weather maps, go to <http://weather.admin.niu.edu/wx.html>. For live radar images of the DeKalb area (or other areas of interest nationwide), go to <http://weather.admin.niu.edu/radar>. (Some images may only be accessible to computers on campus or persons on the NIU campus.)

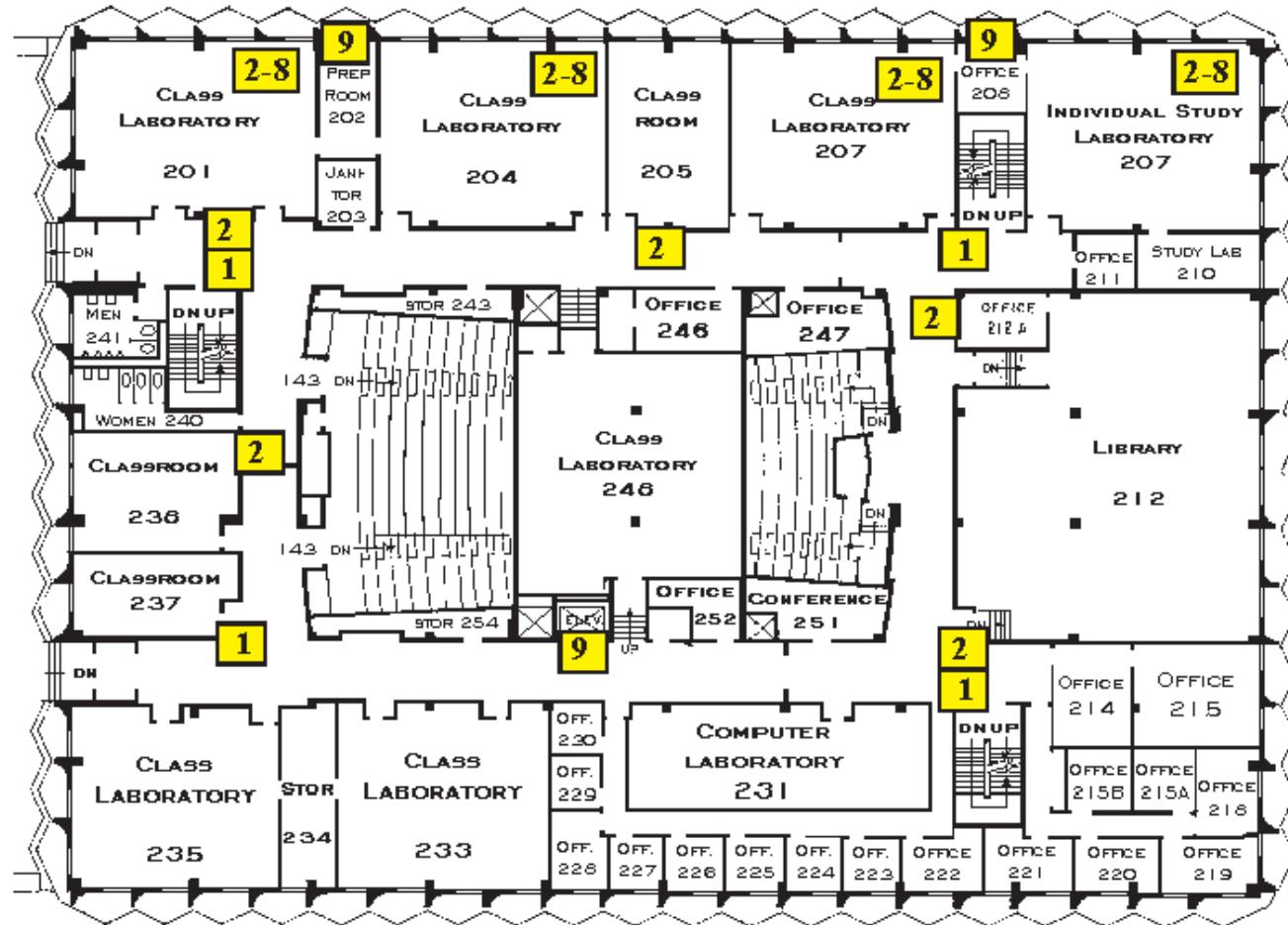
**LOCATION OF EMERGENCY AND  
COMMUNICATIONS EQUIPMENT AND PRIMARY  
EVACUATION ROUTES IN FARADAY HALL AND  
LA TOURETTE HALL**

## **LOCATION OF EMERGENCY AND COMMUNICATIONS EQUIPMENT**

### **FARADAY HALL – FIRST FLOOR**

- |   |                   |   |                 |   |                  |
|---|-------------------|---|-----------------|---|------------------|
| 1 | Fire Alarm        | 4 | First Aid Kit   | 7 | Eye Wash Station |
| 2 | Fire Extinguisher | 5 | Spill Kit       | 8 | Safety Shower    |
| 3 | Fire Blanket      | 6 | Waste Container | 9 | Emergency Phone  |





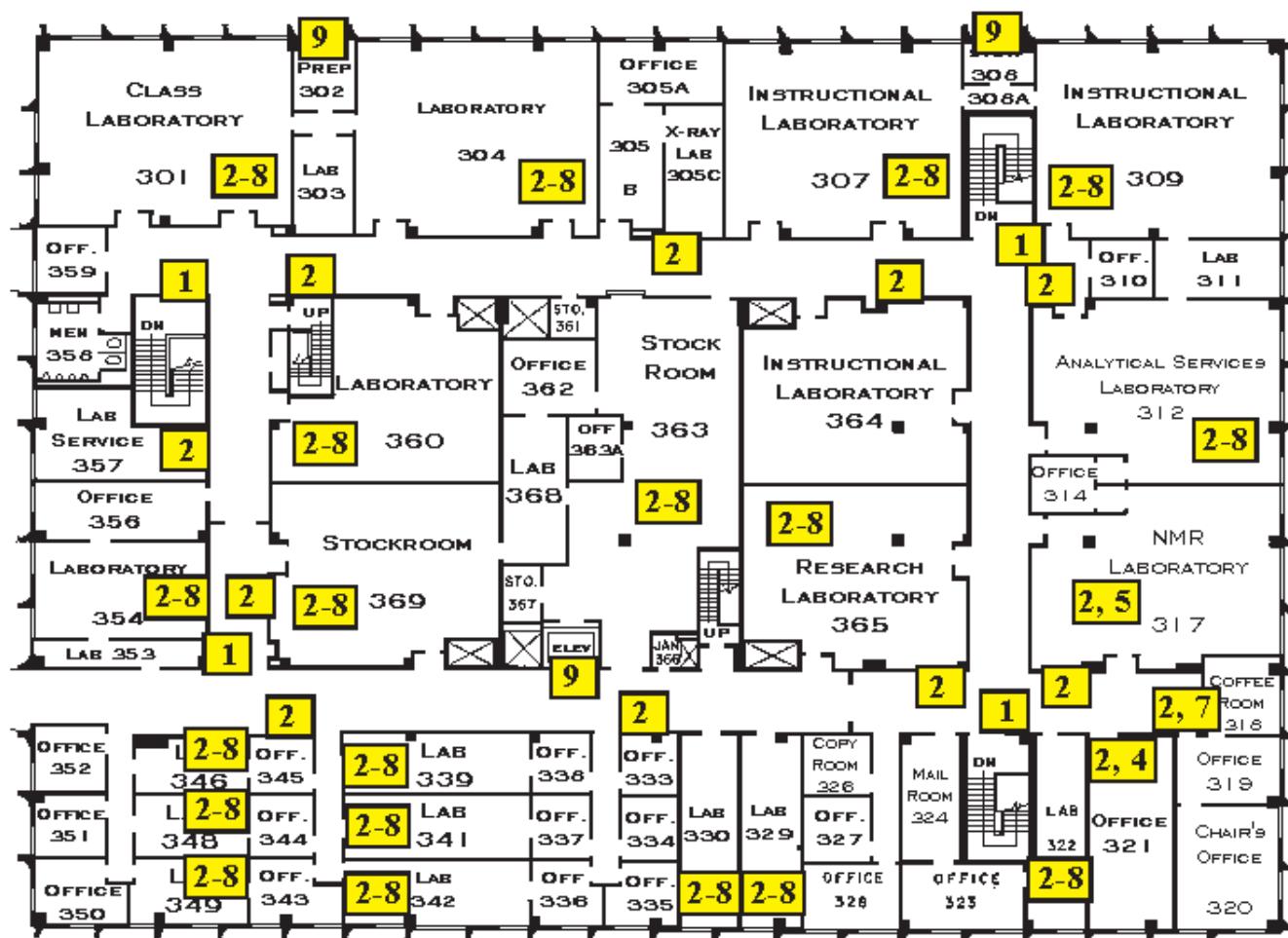
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FARADAY HALL – SECOND FLOOR**

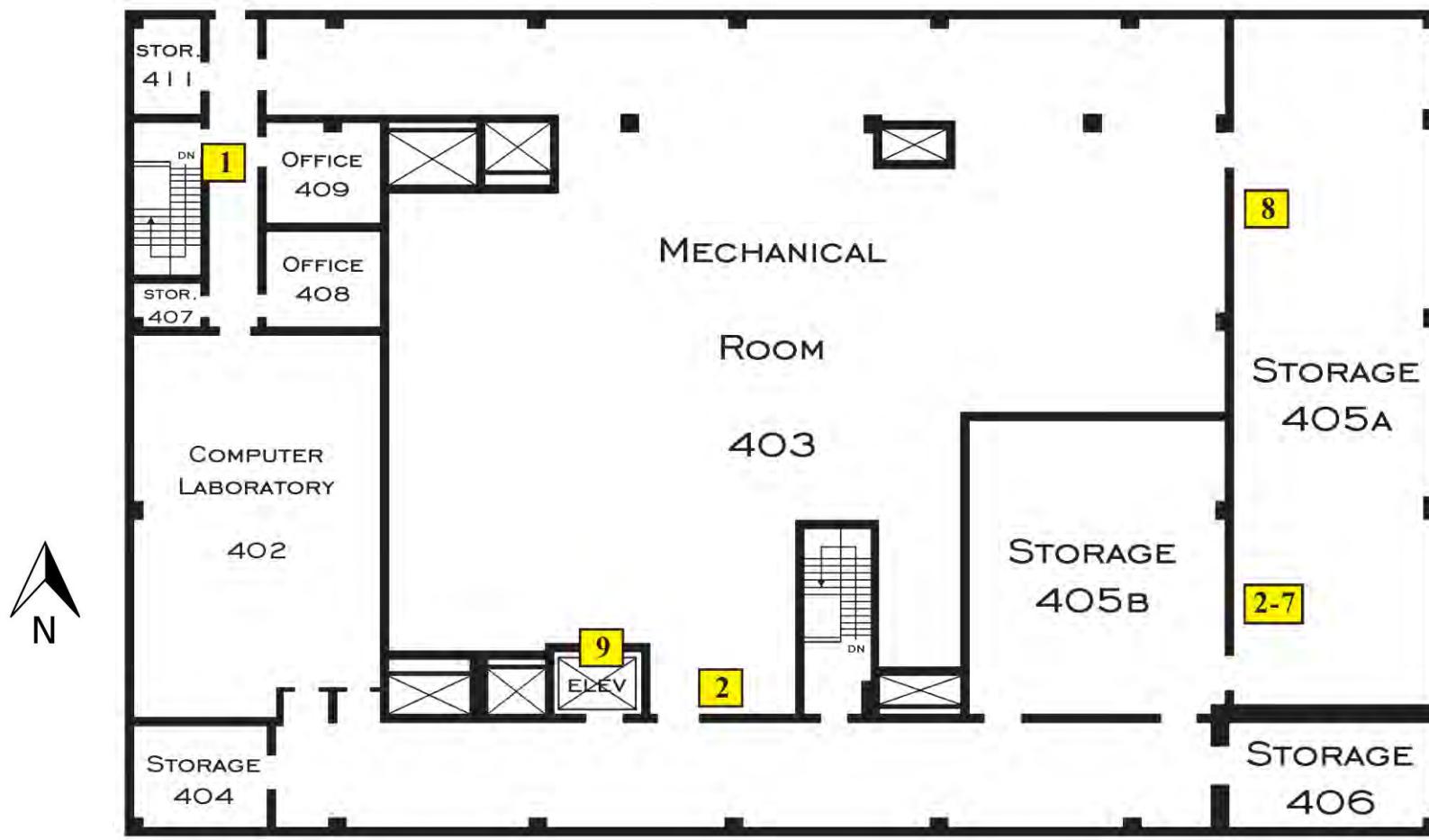
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2	Fire Extinguisher	5	Spill Kit	8	Safety Shower
3	Fire Blanket	6	Waste Container	9	Emergency Phone

## **LOCATION OF EMERGENCY AND COMMUNICATIONS EQUIPMENT**

### **FARADAY HALL – THIRD FLOOR**

- |   |                   |   |                 |   |                  |
|---|-------------------|---|-----------------|---|------------------|
| 1 | Fire Alarm        | 4 | First Aid Kit   | 7 | Eye Wash Station |
| 2 | Fire Extinguisher | 5 | Spill Kit       | 8 | Safety Shower    |
| 3 | Fire Blanket      | 6 | Waste Container | 9 | Emergency Phone  |



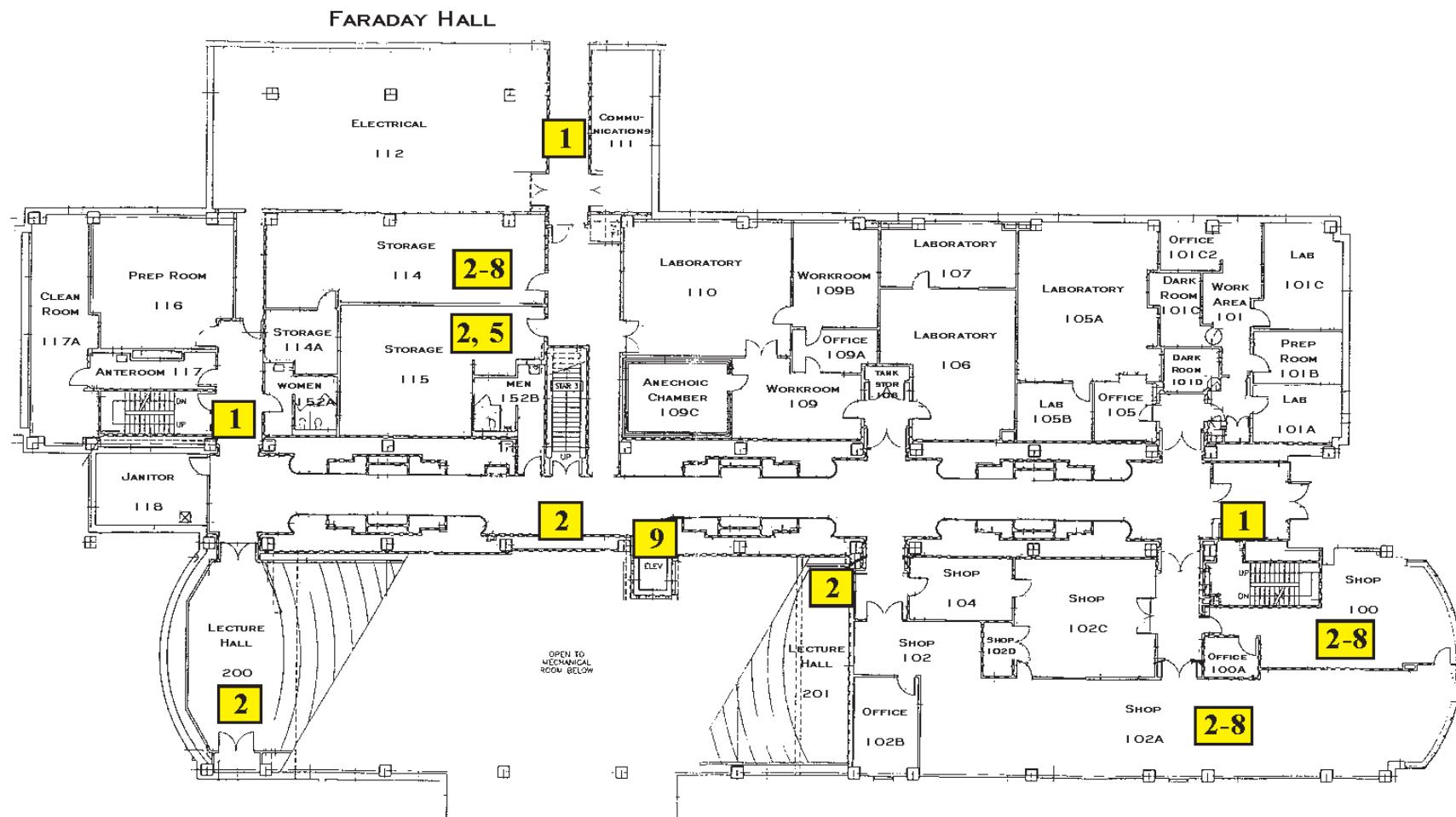


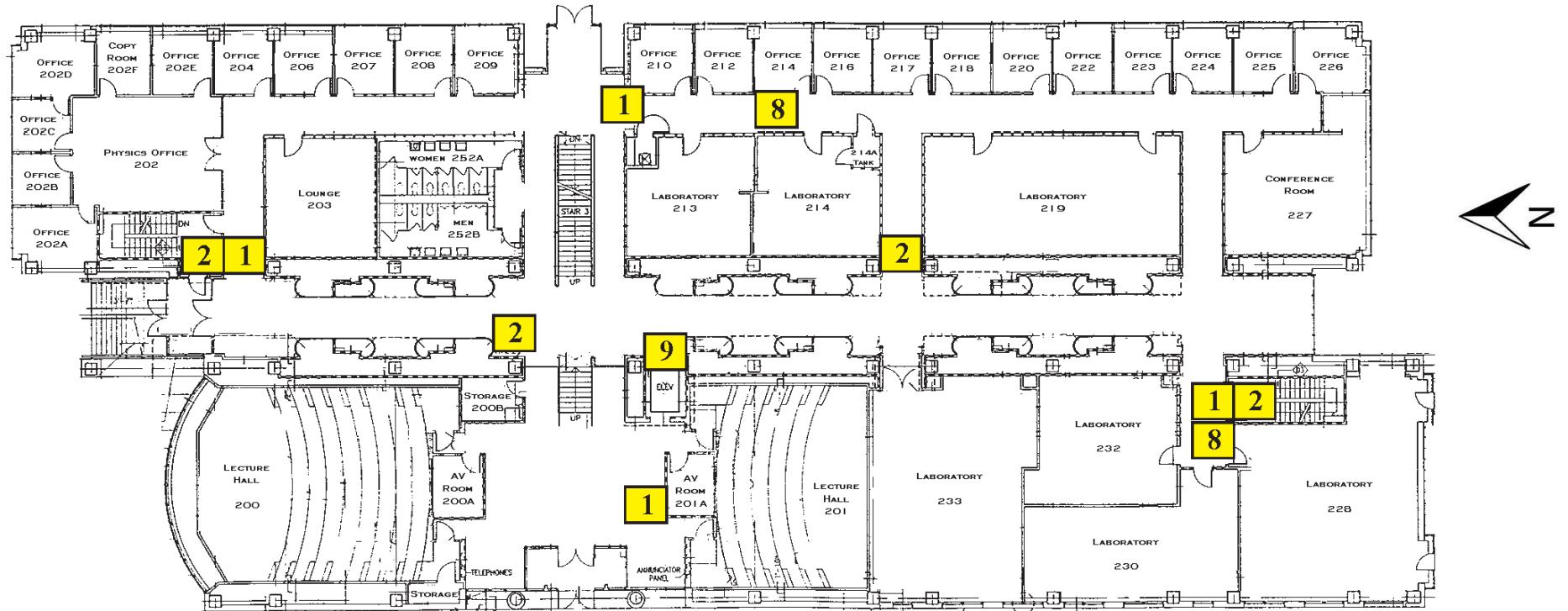
**LOCATION OF EMERGENCY AND COMMUNICATIONS EQUIPMENT  
FARADAY HALL – FOURTH FLOOR**

1	Fire Alarm	4	First Aid Kit	7	Eye Wash Station
2	Fire Extinguisher	5	Spill Kit	8	Safety Shower
3	Fire Blanket	6	Waste Container	9	Emergency Phone

**LOCATION OF EMERGENCY AND COMMUNICATIONS EQUIPMENT**  
**LA TOURETTE HALL – FIRST FLOOR**

1	Fire Alarm	4	First Aid Kit	7	Eye Wash Station
2	Fire Extinguisher	5	Spill Kit	8	Safety Shower
3	Fire Blanket	6	Waste Container	9	Emergency Phone



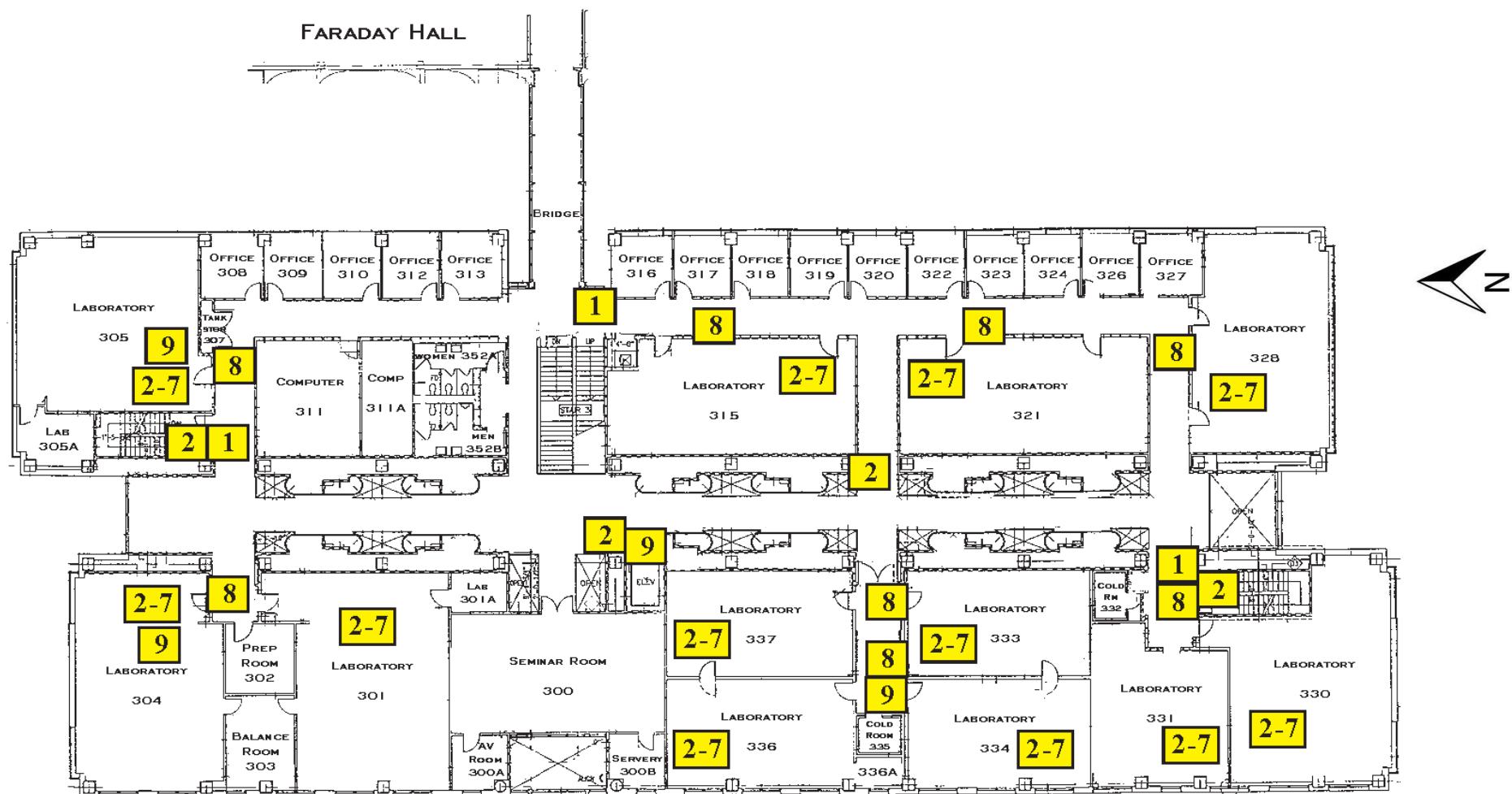


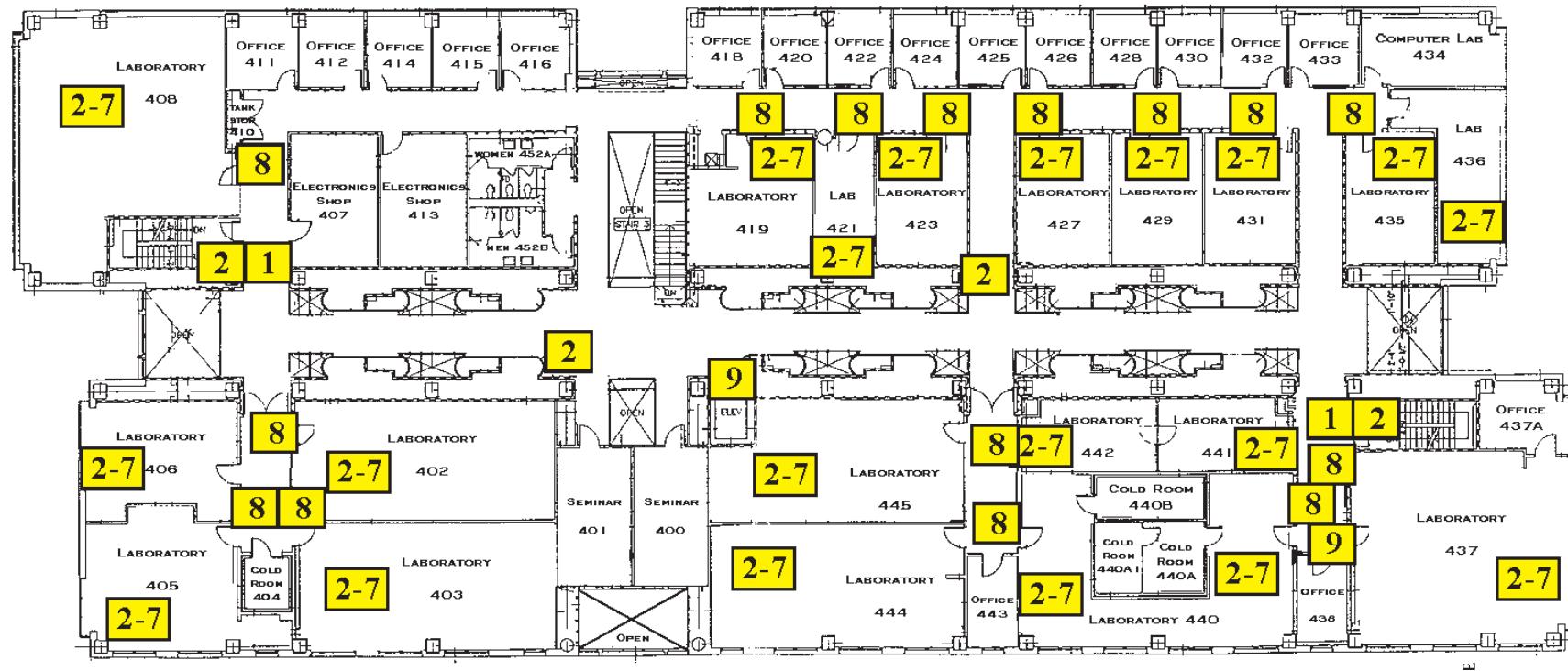
**LOCATION OF EMERGENCY AND COMMUNICATIONS EQUIPMENT  
LA TOURETTE HALL – SECOND FLOOR**

1	Fire Alarm	4	First Aid Kit	7	Eye Wash Station
2	Fire Extinguisher	5	Spill Kit	8	Safety Shower
3	Fire Blanket	6	Waste Container	9	Emergency Phone

**LOCATION OF EMERGENCY AND COMMUNICATIONS EQUIPMENT**  
**LA TOURETTE HALL – THIRD FLOOR**

1	Fire Alarm	4	First Aid Kit	7	Eye Wash Station
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3	Fire Blanket	6	Waste Container	9	Emergency Phone



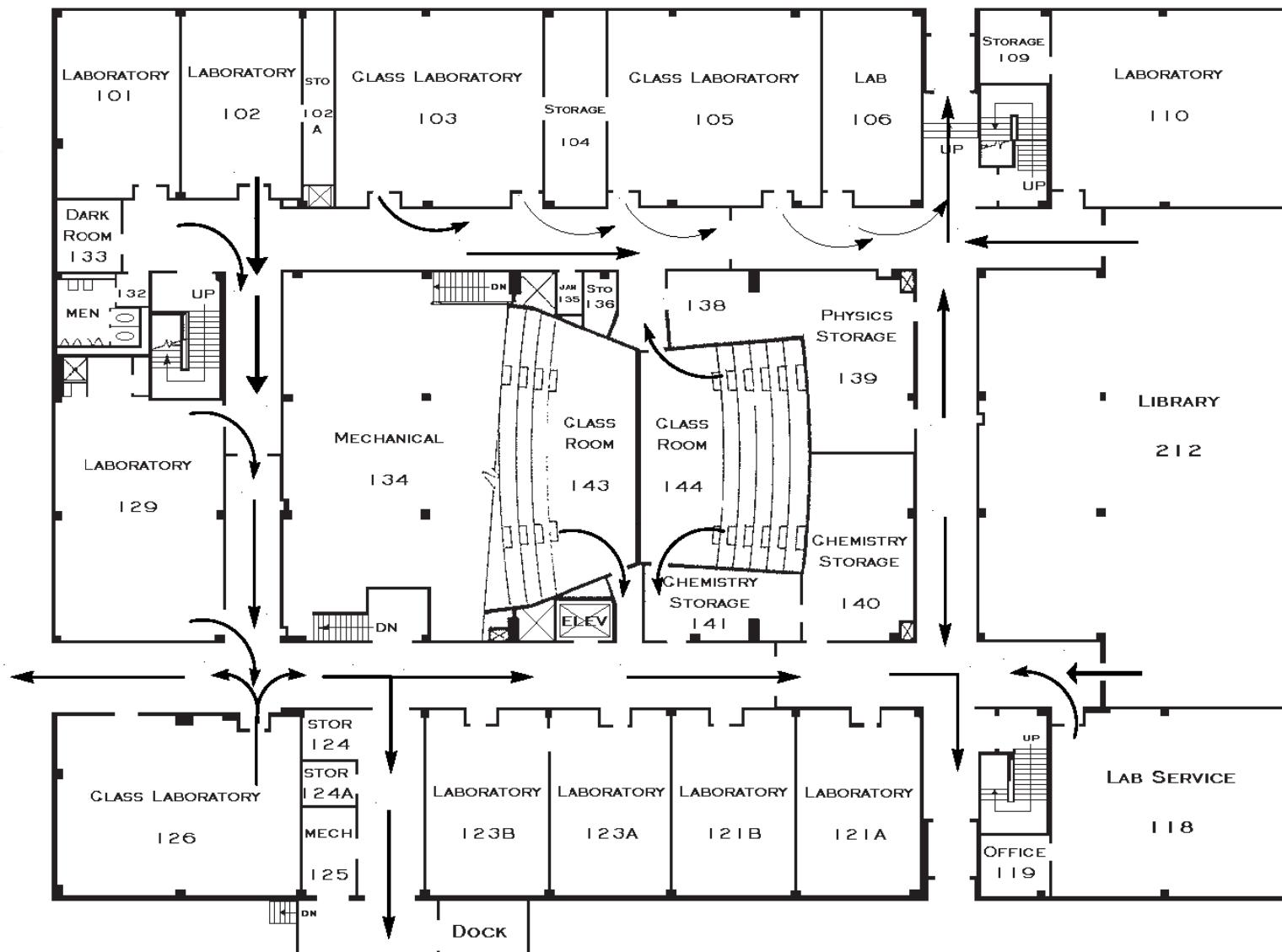


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LA TOURETTE HALL – FOURTH FLOOR**

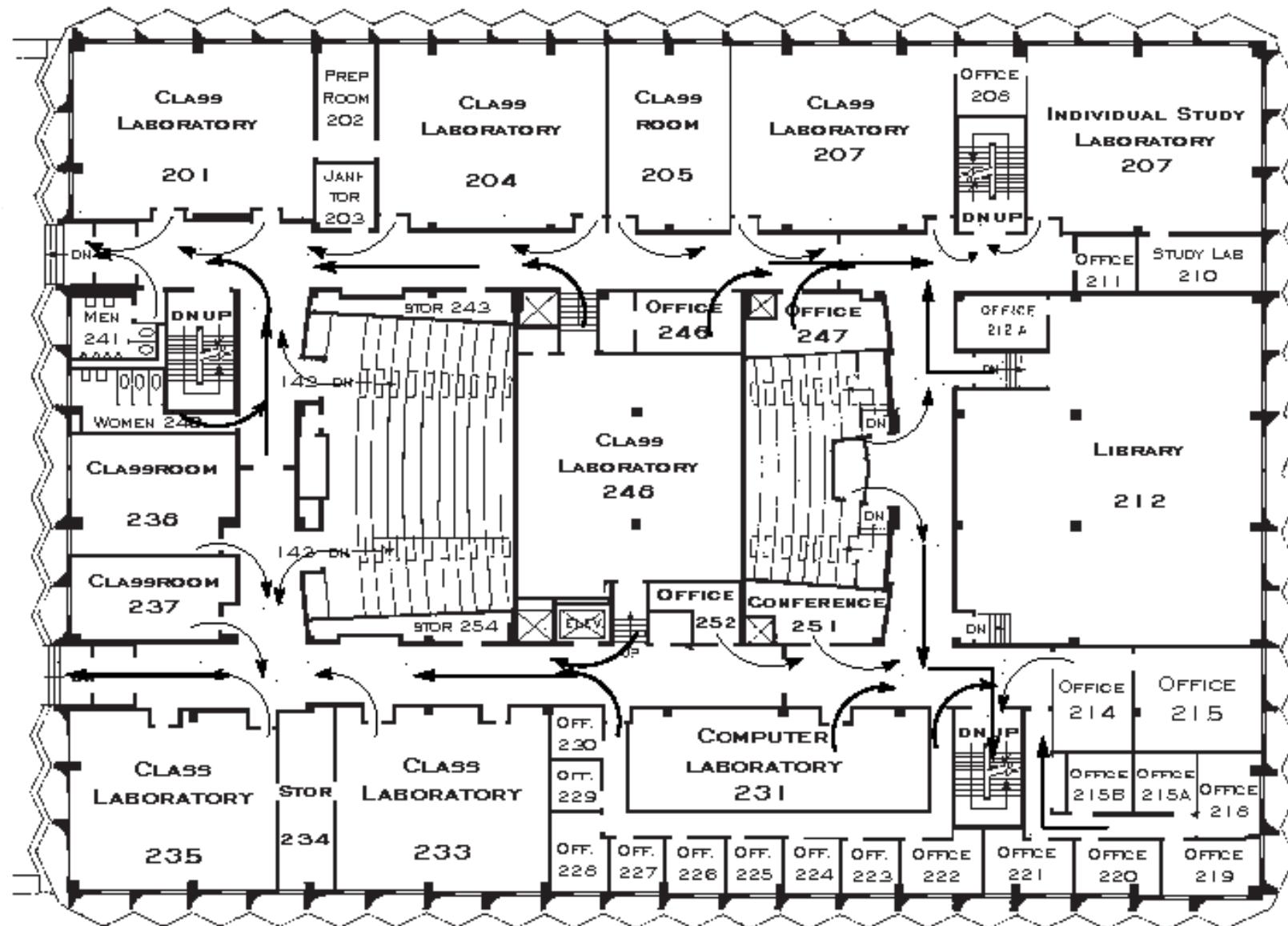
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3	Fire Blanket	6	Waste Container	9	Emergency Phone

**PRIMARY EVACUATION ROUTES  
FARADAY HALL – FIRST FLOOR**

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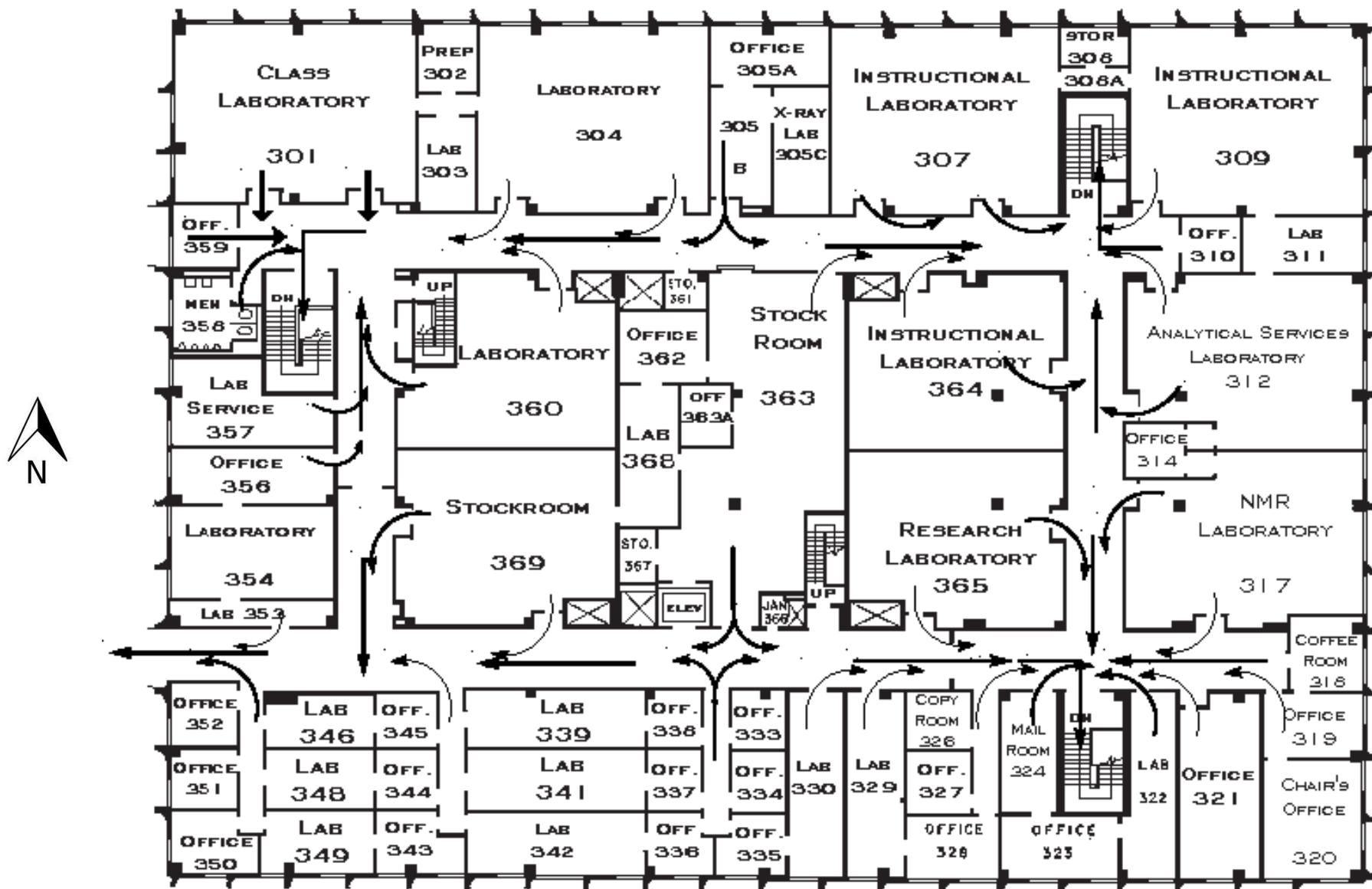


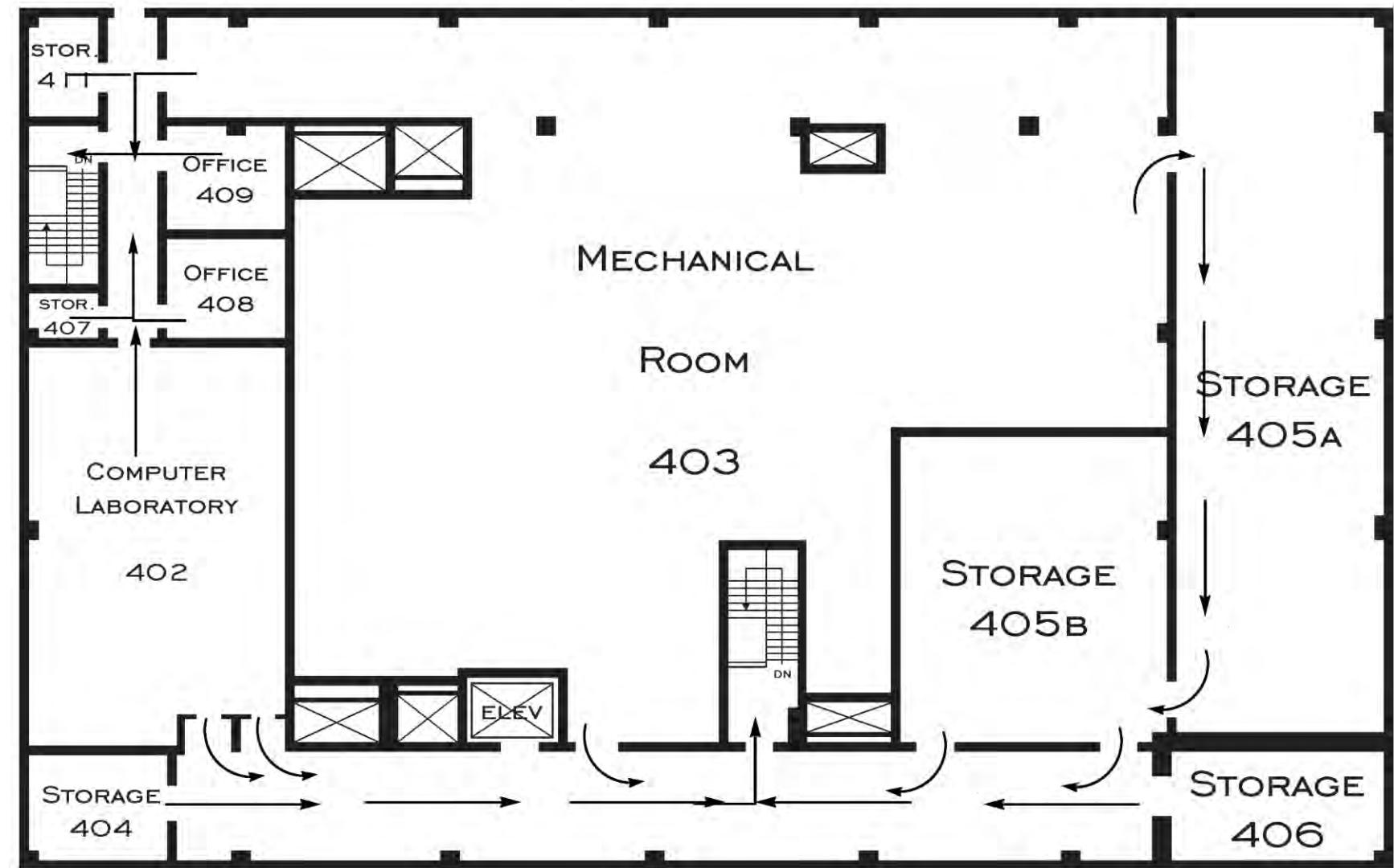
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PRIMARY EVACUATION ROUTES  
FARADAY HALL – SECOND FLOOR

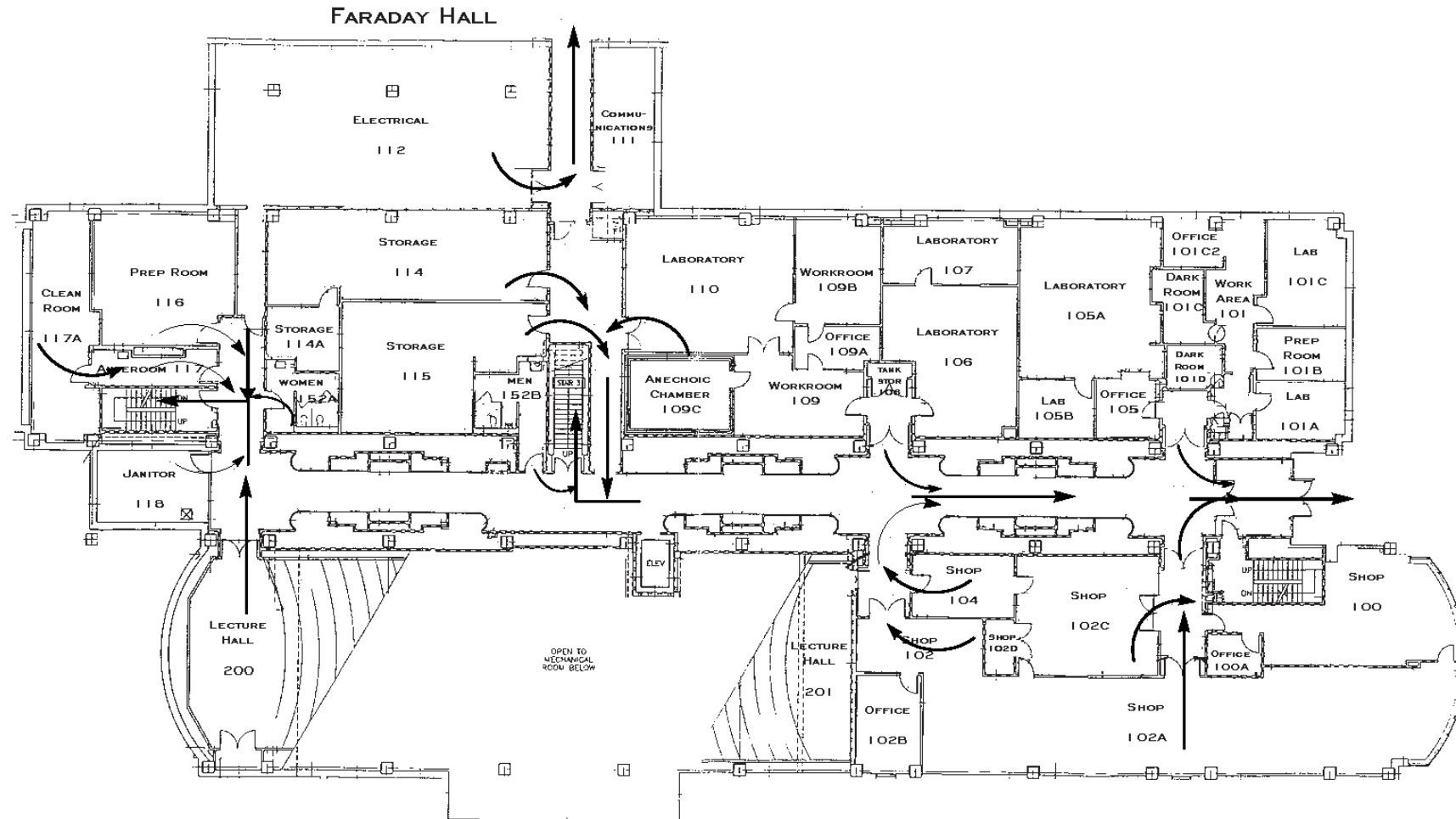
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FARADAY HALL – THIRD FLOOR**

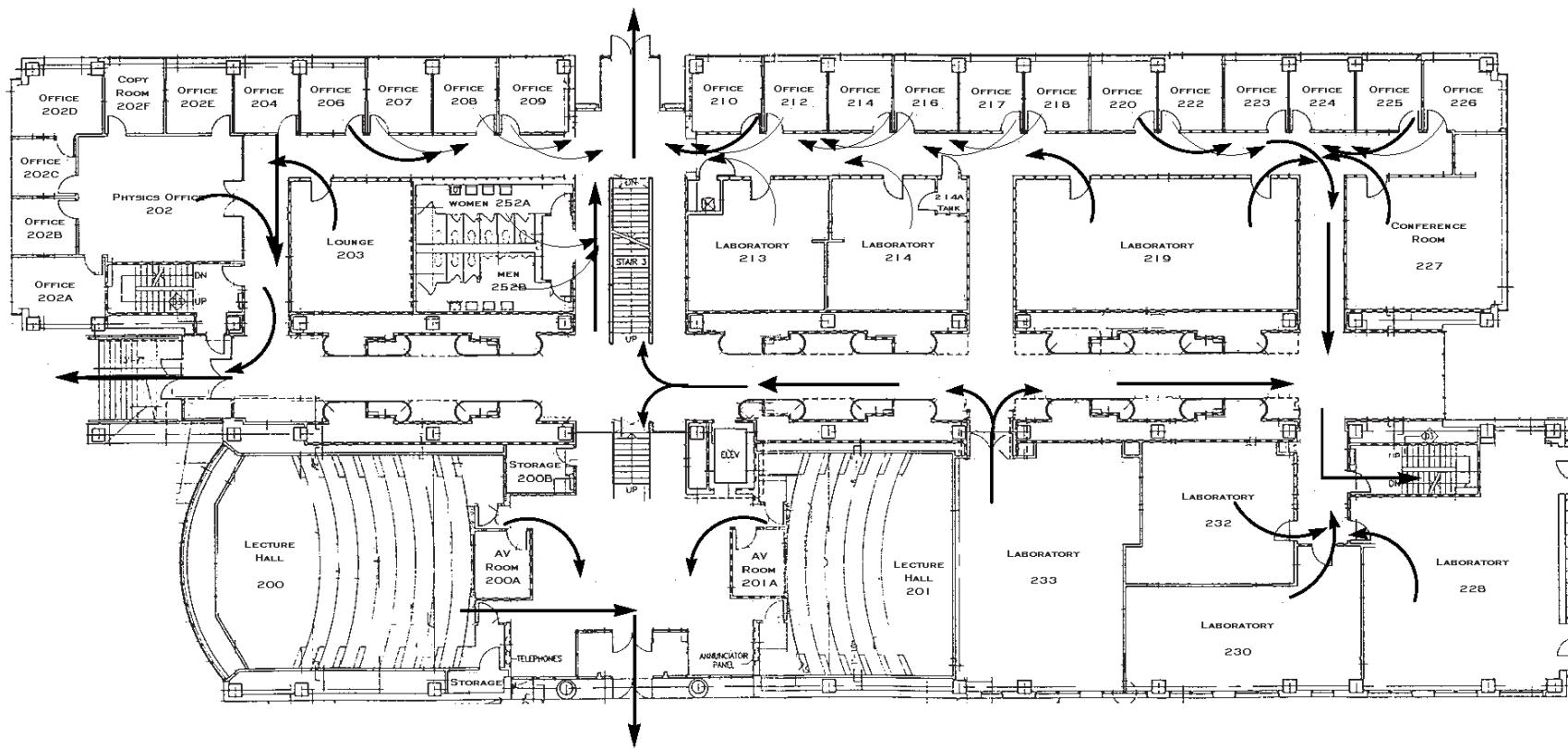




PRIMARY EVACUATION ROUTES  
FARADAY HALL – FOURTH FLOOR

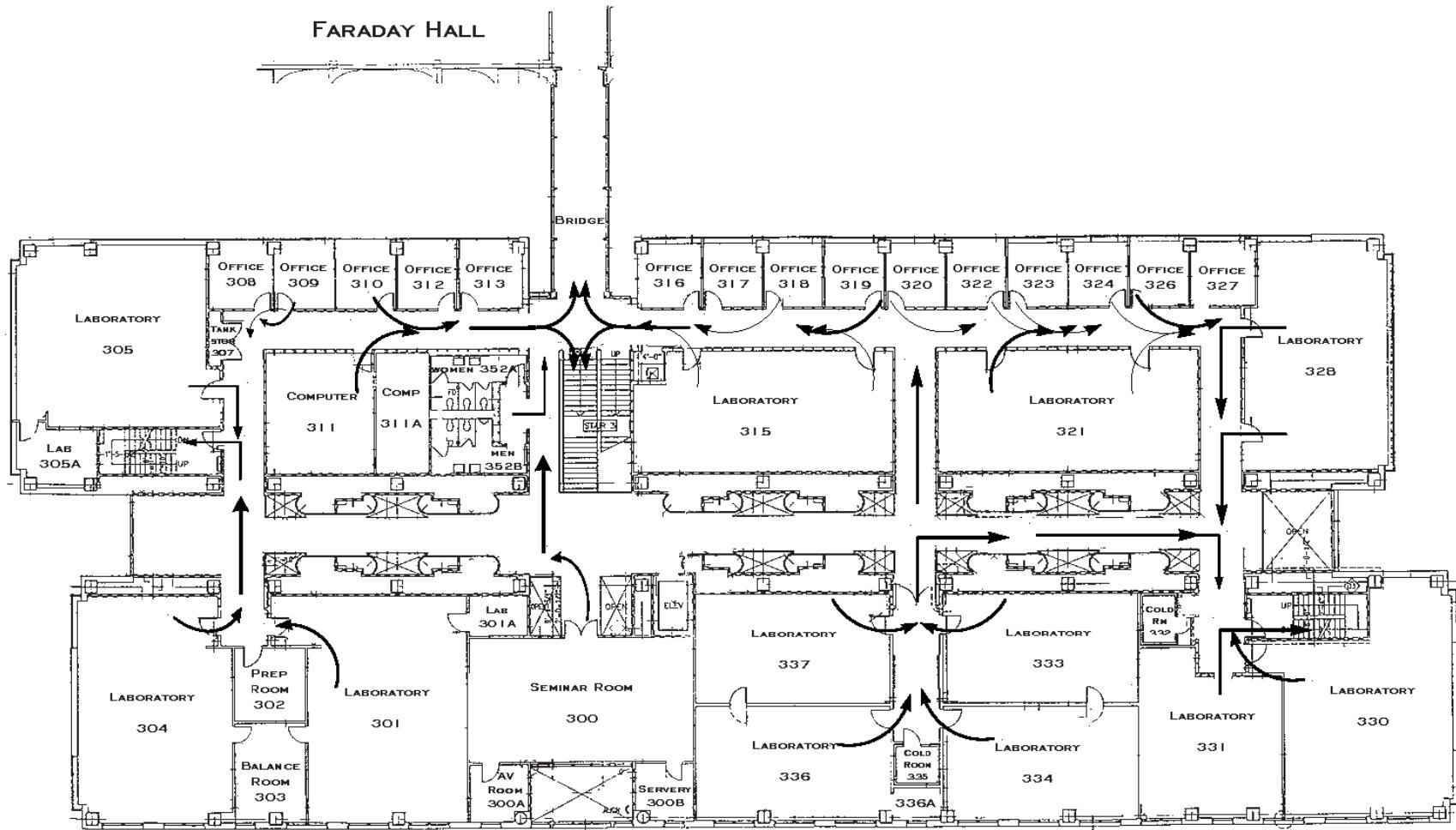
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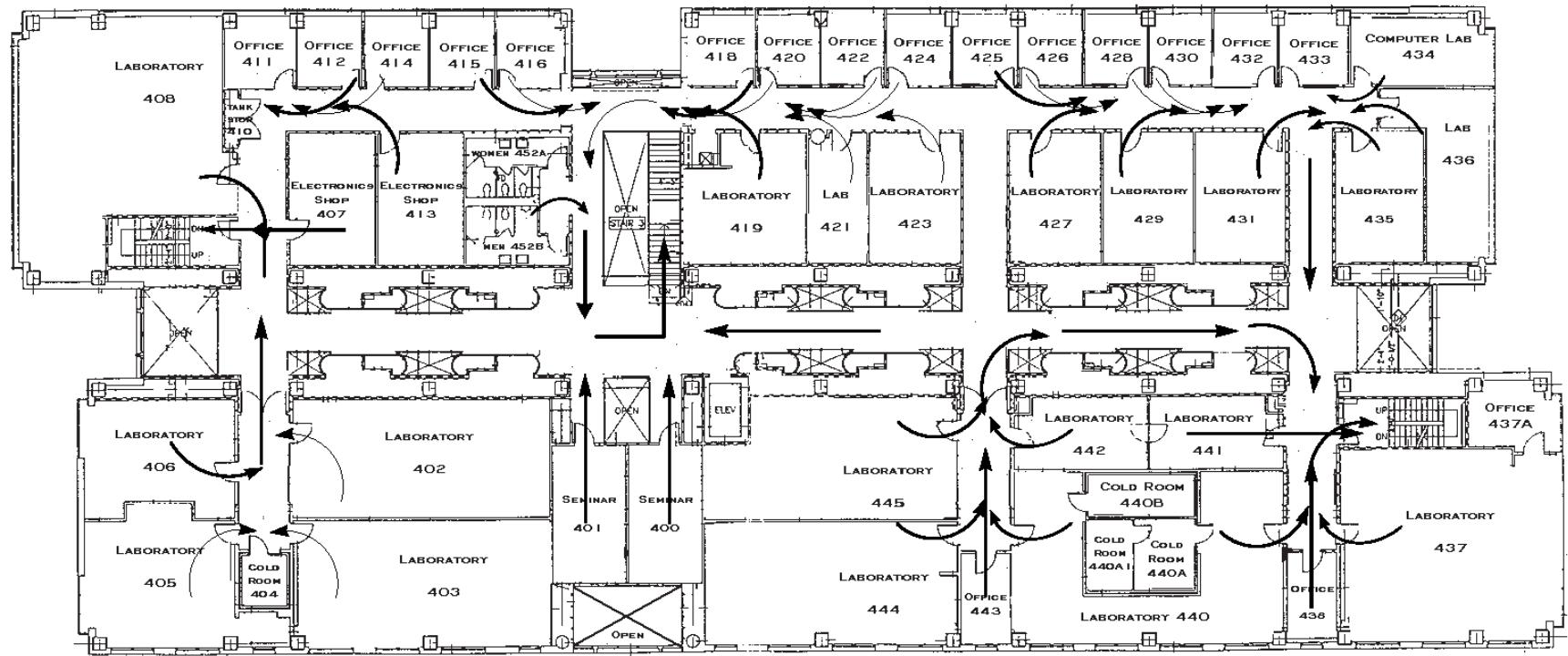




**PRIMARY EVACUATION ROUTES  
LA TOURETTE HALL – SECOND FLOOR**

**PRIMARY EVACUATION ROUTES  
LA TOURETTE HALL – THIRD FLOOR**





**PRIMARY EVACUATION ROUTES  
LA TOURETTE HALL – FOURTH FLOOR**

