

## **GENERAL PURPOSE CLASSROOM GUIDELINES:**

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**GENERAL NOTE:** *everything* specified for General Purpose Classroom spaces must be compliant with NUFM & NUIT Construction Standards and all applicable building codes: current City of Evanston codes and all other governing authorities. These guidelines have been reviewed and endorsed by the Classroom Committee. The purpose is to document what NU has provided and what should be provided for Registrar Classrooms for reference. Departmental or School classrooms/seminar rooms are per department program and may vary from these guidelines.

**CLASSROOM CATALOG, view photos of all General Purpose classrooms at:**

<http://www.northwestern.edu/fm/campus-spaces/classroom-catalog2014.html>

**SIGNAGE:** provide room ID sign for each General Purpose Classroom that includes the room name, “Classroom”, the student capacity, Academic & Research Technologies (A&RT) help phone number, x77666, and Facilities Customer Service phone, x15201 on all room signs. [i.e. separate lines: CLASSROOM, cap. 35, AV help: 847-467-7666 or x76666, Facilities help: 847-491-5201 or x15201]. On a case by case basis, provide wayfinding signs, too. Also provide an 8x10, ‘Please return furniture to this room sign’, inside the room, above the light switch with image(s) and/or diagram showing how furniture is to be rearranged.

**WALLS:** paint; color per building standard or project.

**FLOOR:** carpet tile – larger tiles, stain hiding patterns preferred. Rubber or linoleum is encouraged under fixed seating, may be used in classrooms, too. Provide rubber/vinyl base at corners and steps prone to heavy use areas.

**HVAC:** All classrooms require air conditioning.

**CONVENIENCE POWER OUTLETS:** required in new classrooms in new buildings. Preferred in existing classrooms but recognizing there may be power distribution limitations that limit how many or if any can be added.

**ACOUSTIC PANELS** need to be provided in rooms with pronounced echo (hard ceilings). Panels may be located on ceiling and/or walls. Quantity, size and material are specific to the room layout.

**LIGHTING, LIGHTING CONTROLS:** provide longest life lamps, 4100K color; consult with Academic Technologies to help determine how the lights are switched. In larger rooms with new lighting systems, the lights should be controlled at the wall switches and through the AV system (Crestron). LED is preferred for new lighting installations and fixture design should include direct/indirect lighting. Induction lamps or super long life (68,000 hours) T8 lamps are preferred. New fixtures to have a minimum 5 year warranty. T5 fixtures are acceptable. T5 HO (high output) fixtures are unacceptable because the product tends to run hot, decreasing fixture lifespan. Fixtures must be designed and installed so bulbs are able to be changed without tools to access the bulbs. Fixtures should have a closed design or be designed in a way as to not admit flying insects.

**BLINDS:** classrooms with windows need working blinds. Type varies by building. Occasionally motorized shades are funded by a project. Should this happen, coordinate the specification with Academic Technologies so that the lights will also work with the Crestron AV controls. In order of preference, shades

may be woven, slatted miniblinds or roller shades. Amount of blackout is specific to the school or department need.

**DOOR:** provide window in door; size is whatever is standard for that building.

A window adjacent to the door is also acceptable. The goal is to have some window area at the entrance so that someone heading into to the room knows if it is occupied and also to provide a little more openness to the classroom.

**LOCKS AND LOCKING SCHEDULE:** Many General Purpose Classrooms are unlocked 24 hours/day, Monday – Friday, and are open for 9 or more hours a day on weekends. Sometimes Millenium electronic access specified, but it's typically specified to have classrooms unlock reliably, not to be lock reliably. Because classrooms are open for such long hours, the audit trail feature of millenium can't be counted upon. Even there is a record of a locked door being open, it is very possible that someone could have been opening the door for someone else. All new General Purpose classrooms with electronic access should have lock hardware that 'fails safe' so that for most malfunctions, the room will unlock, rather than lock (fail-secure). This is to avoid having students be locked out of classes or times they are booked to use the classrooms. The Office of the Registrar sets the locking schedule for General Purpose Classrooms. The Office of the Registrar will email the Lock Shop an update whenever a change in schedule is needed.

**POWER, DATA, LOW VOLTAGE RACEWAYS FOR AV EQUIPMENT:** all classrooms have smart equipment that needs power, data and low voltage pathways. There will be a monitor or projector that requires a dedicated 20A power outlet and a raceway for low voltage wires from the projector to a location on the wall nearest to the podium. The podium holds Crestron touch panel, cords to connect a laptop to the monitor/projector, speakers, document camera and a blu-ray player. Typically, the podium will require a dedicated 20A outlet. Registrar classroom technology is specified by NUIT Academic & Research Technologies. Systems can be more elaborate than described above and those will require more power and data. Some rooms require a remote AV closet for AV equipment, too. Provide a campus only wall phone (with cord long enough to reach podium) in all Registrar classrooms to call A&RT for technical support. Verify with A&RT how many data outlets are necessary but most classrooms with loose furniture need 4 data jacks plus a campus access wall phone. The projector or monitor typically does not need a data line (verify with A&RT).

**PROJECTION SCREENS:** manual: Dalite model C with CSR (controlled screen release). Screens need to be installed in such a way as to allow them to be replaced without rebuilding a drywall enclosure. Pocket screen with enough room to remove and reinstall. Specify either Dalite, Draper or Christie for motorized screens, but do not use tension screens with adhesive tape as the adhesive that holds the tension cables generally pulls loose after 2 years, leaving black marks on the screen surface and eventually gluing the screen to the tape, greatly shortening the life of the screen. Starting in 2014, there is a push to provide more motorized projector screens because faculty prefer this and screens last longer without replacement. Each screen has an integral low voltage switch so it is controlled through Crestron at the podium and there is also a wall switch. Screen size and aspect ratio per Academic & Research Technologies recommendation.

**SECURITY FOR PODIUMS AND PROJECTORS:** FM installs security cables and locks for the projector, monitor and podiums. A&RT installs audible alarms at each projector, monitor and podium.

**MARKERBOARDS/CHALKBOARDS:** either is fine; the specifier is to find out which is preferred for that room. Custodial supplies chalk but purchasing/providing markers is the responsibility of the faculty to provide. Whichever surface is provided should have a lifetime warranty for the writing surface. Providing multiple walls with boards is encouraged. Install at 34-36" to the bottom edge of the board. Recommended manufacturers are AARCO, Quartet – chalkboards and Polyvision for markerboards. Other manufactures are fine as long as they have a lifetime warranty for the writing surface.

**CLOCK:** provide (1) American Time and Signal 12" clock AllSet battery operated clock in back of classrooms up to 1500sf. Use 15" diameter in larger rooms.

<http://www.atsclock.com/files/pdf/Sect5BatteryClocks.pdf>. Other clocks are acceptable but they should have minimum 5 year battery life and be atomic (self-righting for correct time and daylight savings).

**TABLET ARMCHAIRS:** 1<sup>st</sup> choice: Steelcase Node tablet armchairs, with cup holder and tablet holder, higher back style. 2<sup>nd</sup> choice: Steelcase Node, mid-back, without accessories. The writing tablet on Node chairs is large enough to be equally well suited for left and right handed students.

Other acceptable tablet armchairs: KI Torsion on the Go (poly back upholstered seat, nesting chair on casters). From 2000 to 2013, the standard tablet armchair was the KI Piretti chair and there are many in working condition on campus but we are updating tablet armchairs on campus over the next few years, so these are being phased out. The goal is to continue to replace all classroom furniture every 12-15 years.

**TABLES & CHAIRS:** must have a minimum 10 year warranty. Adjustable height chairs with tables preferred. The goal is to continue to replace all classroom furniture every 12-15 years. At least 1 table in each room with tables and chairs to be height adjustable. Casters are recommended, or a combination of casters on 1 side and glides on the other.

**FIXED SEATING:** KI Strive post and beam, NO UPHOLSTERY. Theater seating: KI Concerto, fabric to have minimum 200,000 double rubs and stain resistant coating (nano-tex or equivalent). Writing tablet to have a wider style, 12% to be left handed. Minimum 10 year warranty. The goal is to provide ongoing service and repair so all fixed seating it lasts 20-25 years before replacement is necessary.

**TEACHER FURNITURE:** provide a small table and chair, and a mid-height stool with a back at the front of each classroom for faculty use. Minimum 10 year warranty. Replace every 12-15 years.