Elizabethtown College Architectural Servers

**TSOJIN SERVER**  IP:174.54.14.202

*Including FYSworld for Etown College Freshmen*

Earned TSOJIN Ranks: Guest, Member, Builder, Architect, Master, Admin, Grandmaster

Robie House by Joseph (USA)  [VIDEO]

Four GREEN Towns in FYSworld  [VIDEO VIDEO VIDEO VIDEO]

DigitalDesignWorld  **EGR332** Digital Circuit

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**RICKY STURZ SERVER**  IP:199.188.100.104:25575

FYS Team-Build of Etown Housing  [VIDEO]

Ricky’s new Etown Field House design, and FYS Team-Build of Masters Center  [VIDEO]

RedstoneWorld  **EGR332** Digital Circuit

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**NEWS (2012):** United Nations uses Minecraft for Sustainable Design (300 sites)

Read more here:

http://www.unhabitat.org/categories.asp?catid=9
http://informedinfrastructure.com/1775/un-habitat-taps-minecraft-for-urban-development/
http://www.learninggamesnetwork.org/mojang-un-block-by-block/
Models of Etown College Hackman Apartments built BLOCK by BLOCK in 2 hours:
by Dr. Wunderlich's 16 students in FYS course "Scientific Modeling for Sport" on Ricky Sturz Server.
(emerging Etown student research on small-scale CrowdSourcing )

VIDEO

See more videos
Team-Build of Masters Center for Science, Math, and Engineering

**PARTICIPANTS:**
- Dr. Wunderlich’s EGR280 Engineering Research student Ricky Sturz (on his server)
- Dr. Mike Silberstein’s Cognitive Science Class (12 students)
- Dr. Wunderlich’s First Year Seminar Class (16 students, plus two TA’s)
- Dr. Wunderlich’s Computer Design Class (up to 16 students)
- Dr. Wunderlich’s Green Architectural Engineering Class (up to 7 students)

**VIDEO**

[Image of real and virtual view of the building]

Approximately half the participants semi-lined-up

[Image of the building in Minecraft]

See more videos
Individual Green Home Architectural Builds, and Community-Development Environmental-Planning of towns in TSOJIN FYSworld


J. Wunderlich PhD, First-Year-Seminar course "Scientific Modeling for Sport"

ASSIGNMENT (10% of course grade, PLUS two IEE grades, PLUS a heavily-weighted question on Final Exam, PLUS a big part of class participation, PLUS possible extra credit): Build a Green Home in FYSworld in your designated village. Assume you’re in a Southeastern Pennsylvania climate. Create a sign on your home with your name. Your grade will be based on:

1. **PASSIVE SOLAR (10 points):** Without the use of any electrical or mechanical devices, let light into your house to warm it in the winter, but not let in too much sun in the summer. Remember the sun rises in the East, sets in the West, tracks across the sky at high angles during hot months, and at low angles during cold months (since minecraft doesn’t yet have variable sun paths, just be aware of which way is South – figure it out from the trajectory of the sun). Create **OVERHANGS** on roofs to strategically shade windows (estimate dimensions), and note that too many western-facing windows may cause overheating. Also, have sun shine on interior **THERMAL MASS’s** to absorb heat during the day, and release it at night. Assume thick masonry works very well, and water works even better, but may be more difficult to implement (and maintain).

2. **ACTIVE SOLAR (10 points):** Create Solar Panels (use a black material) and place them on your house and around your site such that you maximize energy generation while not disrupting the movement of people & animals. You may place them flat, but creatively angling them is better.

3. **NATURAL DAYLIGHTING (10 points):** Maximize the entrance of sun into the house while not overheating the house in summer months.

4. **MITIGATE COLD NORTHERN WIND (10 points):** Through site selection, possible placing of dirt & grass, and design of building’s northern elevation (including wall thickness and materials chosen), shield the house from cold Northern winds; but consider letting some light in for natural daylighting and preserving views.

5. **COMMUNITY GARDEN (10 points – everybody in village gets same points):** Create a large community garden of eatable plants -- till/hoe ground; place water (in adjacent trenches) with water bucket. Plant carrots, potatoes, seeds, etc, and fertilize everything with bone meal.

6. **COMMUNITY LIVESTOCK (10 points – everybody in village gets same points):** Create many animal pens, and spawn many animals for eating and producing milk.

7. **OVERALL ARCHITECTURAL ESTHETIC (20 points):** House should not only be the ultimate sustainable habitat, it also needs to be livable, and visually pleasant (interior and exterior), so balance all other criteria above while creating beautiful Architecture. Your architecture should be complimentary to all else in your village.

8. **URBAN DESIGN and CITY PLANNING (20 points – everybody in village gets same points):** Create common-areas together (e.g., a piazza, a central market, a central park, etc.) AND designate a big lot to be used by visiting high-school students on November 19 to build a Wellness Center in your town (with indoor pool, large activity room, and lockers).

**EXTRA CREDIT:** Make something electromechanical, and operate it with circuits (and maybe logic gates). Also, extra credit is being given to Good, Sheckard, Williams, and Davala for work completed before this assignment.

**VILLAGES and VILLAGERS:**

- **Davalaville(WEST):** Anthony Davala(Mayor), Jacob Evans, Brody Feltman, Joni Fleming
- **Goodville(NORTH):** Justin Fortney, David Good(Mayor), Bryce Kenner, Brynne Kirsh
- **Sheckardville(EAST):** Aaron Rahn, Evan Roche, Danielle Schanbacher, Michael Sheckard(Mayor)
- **Williamsville(SOUTH):** Craig Sinkovich, Dylan Vogel, Damien Weidner, Nathaniel Williams(Mayor)
Davalaville

VIDEO

(photos from SouthEast)

From left to right, Joni’s home, two buildings by Mayor Davala (he also built two homes), then Brody and Jake’s homes, then another building by Mayor Davala
Goodville

*VIDEO*

*(photos from SouthEast except where noted)*

Community garden center by Mayor Good

Town library and railroad by Mayor Good

Mayor Good's and Bryce's homes

Brynne and Justin's homes
Sheckardville
VIDEO
(photos from SouthEast)

Town

Town garden

Daniella’s house

Aaron’s house

Mayor Sheckard’s compound

Evan’s house
**Williamsville**

**VIDEO**

*(photos from South-East except where noted)*

1. Town barn and livestock (from west) by Mayor Williams
2. Town bio-dome, small houses, and church by Mayor Williams
3. Damian’s home, and Dylan & Craig’s water house
4. Many other buildings by Mayor Williams
ENGINEERING & PHYSICS
DEPARTMENT DAY
24 visiting High School students built in FYS towns.

Each team of four built in one hour a Wellness Center in a town – with pool, activity room, locker rooms.
Two teams helped build new Field House on Etown Campus (with Track and Courts)
Ricky Sturz Server

(EGR280 Research Project with Dr.W. to build Etown Campus)
All buildings except Hackman Apartments and the Masters Center built by Ricky Sturz

- BSC Student Center
- Zug Music Hall
- Hoover Business Building
- Thompson Gym
- Proposed new Field House design by Ricky Sturz

[VIDEO]
COMPUTER ENGINEERING PROJECTS
by students in Dr. W’s EGR/CS332 Computer Org & Design (Digital Design I)
Using gates, flip-flop’s, etc. to create digital circuits

TSOJIN SERVER DigitalDesignWorld
Digital logic circuits and pistons implementing a combination lock (by Tom Gorko)

RICKY STURZ SERVER RedstoneWorld
Circuit with six seven-segment-display outputs (by Philip Landis & Brady Rudesill)
TSOJIN SERVER FYSworld (outside villages)

City by student FYSgood (partially shown)

Stadium by student FYScheckard

TSOJIN World1 and World3

Main town and airship by Joseph (USA) except building with red flags by Lucas (Australia) VIDEO

Joseph’s airships VIDEO, VIDEO
Art and architecture by Eve (Canada)

Planes and Airport by Cameron (England)

Home/Farmette, caterpillar, and kitten by Anna (USA)

Town by Faith (USA), and her home near a Joseph town
Statues by Oliver (Australia) (animals by Eve)

Joseph’s ships

Joseph’s private-world architecture

Joseph’s rendition of Frank Lloyd Wright’s Robie House (He only glanced at photos)

VIDEO
TSOJIN FOUNDERS: Joseph (USA), Eve (Canada), and Cameron (England)

TSOJIN is a fully protected server – with a concurrently running Database Server to log all activity and to allow administrators to undo damage by other players. The player ranking system also allows incremental use of more powerful commands as players gain skills (and trust). Also, there is a censorship program, and certain features are disable (fire-spread, placing lava, TNT, etc.)

TSOJIN Owner/Grandmaster-designer: Joseph John Wunderlich (Minecraft name: "Joejin")
TSOJIN Administrator/Tech-support: Dr. Joseph Thomas Wunderlich (Minecraft name: "1e2e")
Contact Dr. W at wunderjt@etown.edu or Joseph John at joejinsu@gmail.com to request whitelisting (IP: 174.54.14.202 – a private server)

For RICKY STURZ SERVER, contact sturzr@etown.edu to request whitelisting (IP: 199.188.100.104:25575 -- a private server)

HOW TO USE MINECRAFT:

MOVING
"w"=forward,
"s"=backwards,
"d"=right,
"a"=left
-- best way to move is by simply pointing mouse and holding "w"
Double-click spacebar to fly, and hold it to go up,
Shift-key to fly down – or just space-bar again to drop to ground

MAKING THINGS
left-click to break stuff
right-click to place stuff and open doors
"e" turns inventory on and off (use mouse to drag items into bottom bar for use)

TALKING TO EVERYBODY
"t" to type, then just type what you want to say, then press enter

COMMANDS (there are 100's)
"t" to type, then "/", then the command you want. Try "/help" But you'll only have a few unless you're designated "operator" on Ricky's server, or earn more commands as you are promoted from Guest to Member to Builder to Architect to Master to Admin and then to Grandmaster on TSOJIN server.
"/spawn" to go back to main TSOJIN plaza, or beginning-point of any server. "/warp village-name" to get to your village

LAST UPDATED: 12/14/12