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MTHD-003	Elo Correction, Handicap	MTHD-004	Discipline, Pa2 Round Robin
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1. Background

The *Alchemy Alliance (ALAL)* is a free association of random map scripters, tournament hosts, content creators, and skilled players dedicated to the advancement of custom random maps in Age of Empires II: Definitive Edition. As the nucleus of the *Alchemy AOE Community*, the *ALAL* publishes quality standards for custom random maps, and curates the finished products to be featured in competitions where adventuresome players may exhibit creative strategies for maximum entertainment value.

2. Overview

This handbook describes Alchemy League Season 3, an Age of Empires II 1v1 Round Robin competition hosted by the *Alchemy Alliance* in the third Quarter of 2024. Season 3 boasts the following features, summarized in reference below:

- Participants will not face an opponent who is more than 200 elo higher than they are.
- Tournament elo calculated programmatically from online match history, based on weighted average and refactored to account for aberrant win rates.
- Handicap used sparingly to include extremities of bell curve, so that no player will be turned away based on skill.
- Unique bracketing structure & prize distribution.
- Standard Victory Condition on a Custom Map Pool.

3. Tournament Host

Direct questions/correspondence to TechChariot on discord.

4. Prize Money

The Alchemy AOE Community places no emphasis on monetary gain, but would still like to offer prizes to attract talent and boost excitement in the League.

4.A. Total Prize Pool

The total player prize pool for this season of Alchemy League is \$240 USD, divided in a 1:2 ratio between sprints, such that the first has \$80 in prizes, and the second has \$160. Participation in the second sprint is contingent upon good sportsmanship during the first.

4.B. Disbursement

Participants eligible for prize winnings shall provide a *PayPal* address –to which money may be exported from the United States of America— within one week of the end of each Sprint.

4.C. Distribution

Per MTHD-001, allowing for compensation of the top eight Round Robin scores, with skill bias exponent of 1.25.

5. Timeline

Table 5 below defines important milestones for Season 3 of Alchemy League:

Start Date (YY-MM-DD)	End Date (YY-MM-DD)	Milestone(s):
~	24-06-09	Specifications Finalized
24-06-09	24-06-23	Registration & Custom Map Development
24-06-26	24-07-09	Round 1 (Sprint 1)
24-07-03	24-07-16	Round 2 (Sprint 1)
24-07-10	24-07-23	Round 3 (Sprint 1)
24-07-17	24-07-30	Round 4 (Sprint 1)
24-07-31	24-08-06	Break, Calculate Winnings
24-08-07	24-08-20	Round 5 (Sprint 2)
24-08-14	24-08-27	Round 6 (Sprint 2)
24-08-21	24-09-03	Round 7 (Sprint 2)
24-08-28	24-09-10	Round 8 (Sprint 2)
24-09-11	24-09-17	Break, Calculate Winnings

Table 5: Alchemy League Season 3 Timeline

6. Bracketing Structure

Alchemy League matches players according to a custom neighbor Swiss-type system not available anywhere else.

6.A. Eligibility to Register

Participants shall have 100 1v1 games minimum and win rate between 15% and 85% totaled across all accounts.

6.B. Tournament Elo

Calculated from the most recent 100 1v1 games, linearly weighted per MTHD-002. The computer program that calculates tournament elo shall:

1. Reference internet APIs to garner all alternate or “smurf” accounts corresponding to the same player, derived through IP address, Steam account sharing, and other methods.
2. Reference internet APIs to harvest all relevant match history corresponding to each of these accounts gathered in the previous step.
3. Perform a tolerance sweep on win rate and elo fluctuation over history to estimate a range of possible tournament elos for each participant, with 100% confidence interval.
4. Take tournament elo as the $\frac{3}{4}$ point going from minimum to maximum.

6.C. Number of Divisions

All players are competing for the same total prize pool.

6.D. Neighborly Matchmaking

The Alchemy AOE Community does not send players to inevitable defeat. Participants shall be listed from highest to lowest tournament elo, and matched against 4 “nearby” opponents, such that each player has the same number of matches, regardless of seed number. In this manner, it is impossible to be “bottom” or “top” of division without also being highest or lowest seed in the entire tournament.

6.E. Handicap Correction

Although unlikely, it is possible that the League may not receive sufficient sign-ups to guarantee that the tournament elo difference between opponents is always less than or equal to 200. Therefore, MTHD-003 shall be used to correct for disadvantage beyond such a window (E. G. a 600 elo player receiving handicap to “become” 800 elo, allowing play against 1000 elo opponents).

7. League Format

Alchemy League Season 3 shall consist of a Round-Robin only – no elimination.

7.A. Play-Frequency

Each participant shall complete one set per round, which is a two-week period. Note that the schedule is arranged such that the next round starts one week into the previous round. No exceptions or extensions will be granted.

7.B. Set Size

Each set in the Round-Robin is “Play-All-Two”.

7.C. Selecting Maps

The first of two games will be on the “Map of the Round” (see §11.B). Then, players take turns banning the remaining maps from the pool until only one remains, which will be played for the second game. In this way, no map may be repeated within the same set.

7.D. Selecting Civilizations

There is no civilization draft. After selecting the second map, each player globally bans two civilizations. Then, civilizations are free-pick, no repeat within the same set.

8. Performance Tracking

Participants give consent for their performance in Alchemy League to be published as a subject of intense curiosity, particularly among competitors.

9. General Rules

The following general rules apply in Alchemy League, Season 3:

9.A. Going First

For the purposes of hosting drafts and lobbies, applying bans, etc., when applicable – the HIGHER SEED “goes first” unless otherwise specified.

9.B. Restarts

Restarts are allowed only if a map is bugged from at least one of the following being true.

1. Resources are missing, inaccessible, or at least 50% of their surface area is blocked by terrain or another resource.
2. Starting player-controlled units are missing or trapped by terrain or resources.

Note: Alchemy League maps are held to higher quality standards than most other AOE2 competitions to mitigate/eliminate the risk of needing restarts.

9.C. Wrong Civ Picked

If a player accidentally selects a forbidden civilization after the game is launched (thus having seen the opponent’s civilization), then the game is restarted with that opponent selecting a non-DLC civilization for the mistaken player.

9.D. Cheating

Cheating is forbidden. The following are considered cheating:

1. Bug exploits.
2. Failure to disclose all relevant alternate/“smurf” accounts during registration, thereby attempting to mislead the tournament elo calculation.

9.E. Creative Strategies

Laming/Tower Rushes/Town Center Drops are all 100% allowed. Creative strategies are important to the success of the League.

9.F. Nomad Unit Entrapment

Trapping an enemy unit against a forest or another resource using quick-walling before minute 5 is forbidden on nomad maps.

10. Lobby Settings

Table 11, shown below, summarized the lobby settings require in every game played for the League:

Setting	Requirement
Data Mod	Default
Game Mode	Random Map
Map Style	Standard
Location	[A Map From The Pool]
Map Size	Tiny (2 Player)
AI Difficulty	Standard
Resources	Standard
Population	200
Game Speed	Normal
Reveal Map	Normal
Starting Age	Standard
Ending Age	Standard
Treaty Length	<None>
Victory	Standard
Lock Teams?	Yes
Team Together?	Yes
Team Positions?	No
Shared Exploration?	No
Lock Speed?	Yes
Allow Cheats?	No
Turbo Mode?	No
Full Tech Tree?	No
Empire Wars Mode?	No
Sudden Death Mode?	No
Regicide Mode?	No
Record Game?	Yes

Table 11: Lobby Settings for All League Games

11. Custom Map Pool

Alchemy League Season 2 is designed to give community members an opportunity to exhibit creative strategies on a custom map pool with unusual victory conditions.

11.A. Download Source

To protect creator intellectual property rights, the Alchemy AOE Community does not upload competition resources to the in-game mod center. A collection of random maps satisfying the requirements of [GSRM-GRK-001](#) shall be downloaded by participants from the following location: https://github.com/Alchemy-AOE-Community/CHEM-Random-Map-Scripts/tree/Greek_Maps/Greek_Maps.

The recommended procedure to programmatically download all of the maps is described here: https://github.com/Alchemy-AOE-Community/CHEM-Random-Map-Scripts/blob/_About_/SETUP_ENJOYER.md, but it is not required.

The Alchemy AOE Community server is webhook-configured to notify players of any changes to the random map Github repository. Players are responsible for making sure they are using the latest versions.

11.B. “Map of the Round”

A few days before the start of each round, the tournament host will declare a custom map from the pool to be “Map of the Round”. Typically, if a map pool consists of a mixture of contest maps and “shoe-in” maps, then contest maps are prioritized for selection first. A map cannot be “Map of the Round” twice in the same season of the league.

12. Recording Availability

After playing in each round, recordings proving the outcome shall be uploaded to the appropriate channel in the Alchemy AOE Server before the start of the next round. Although such an upload is ultimately the responsibility of whoever won the set, we would appreciate not being able to predict the winner based on who posted the results.

The following information shall also be included:

- Round Number
- @Player names
- Match Result (Use spoiler tag, sandwich between players)
- Names of maps that were played
- Game Recording Files

A spoiler tag may be attached through use of two vertical bars at the start and end of the message:

|| this is a spoiler message ||

For example, if TechChariot were wiped out by BPDrej in Round 4, then the results could be posted by either player as follows:

Round 4 @TechChariot || 0 - 2 || @BPDrej – Map1, Map2

TechChariot_vs_BPDrej_G1.aoe2record

TechChariot_vs_BPDrej_G2.aoe2record

13. Accessibility

It is important for all League participants to be able to find and communicate with each other. Registration will only be processed for persons in the Alchemy AOE Community Discord Server: <https://discord.gg/h9DvzHBNPr>

14. Code of Conduct

14.A. Applicability

Alchemy AOE Server Rules apply to all activities related to Alchemy League, including direct messaging and in-game chat.

14.B. Off-boarding

Any player may withdraw from the league *between* sprints without detriment to the league or their eligibility to register for future Alchemy-AOE events.

14.C. Discipline

If any player fails to meet the commitments of this handbook, then the tournament administrator shall respond according to MTHD-004.

15. Eligibility

The Alchemy AOE Community does not exclude people on the basis of protected class or unpopular beliefs/associations, and our events are designed to unify the Age of Empires II community around love of the game. Anyone is welcome to sign up for our events, as long as they:

- Make a credible pledge to meet the requirements of this handbook.
- Provide an honest estimation of their skill, so that we can be confident in our ability to find them worthy opponents.

16. Registration

Relevant links provided below:

16.A. Sign Up

<https://forms.gle/BECp7u2HZWrxyEaw9>

16.B. View Signups

https://docs.google.com/spreadsheets/d/1SeBT_3vfluyi-jh-a0Xrg4ZY5gRHXb_mZ4FwqzfuSoY/edit?resourcekey#gid=1152244974

Revision	Description	Change Document	Date (YYYY-MM-DD)
X1	Advanced release for community review/feedback.	N/A	2024/06/02
Original Release	Added “setup enjoyer” link for optional programmatic download. Added Bill of Materials with clickable links.	N/A	2024/06/09
R1	Section 4.A revised FROM: “...divided equally between Sprints 1 and 2 (\$120 per sprint).” TO “divided in a 1:2 ratio between sprints, such that the first has \$80 in prizes, and the second has \$160. Participation in the second sprint is contingent upon good sportsmanship during the first.” Section 7.C: revised FROM: “Then, starting with the <i>lower seed</i> , players take turns banning the remaining maps from the pool until only one remains...” TO “Then, players take turns banning the remaining maps from the pool until only one remains...”.	N/A	2024/06/19