1. **Definitions –** per <u>CH-01</u>.

2. **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.

3. **Overview –** This handbook describes Alchemy League Season 2, an Age of Empires II 1v1 Round Robin competition hosted by the *Alchemy Alliance* in the second Quarter of 2024. Season 2 boasts the following features, summarized in reference below:
   A. Participants will not face an opponent who is more than 200 elo higher than they are.
   B. Tournament elo calculated programmatically from online matched history, based on weighted average and refactored to account for aberrant win rates.
   C. Handicap used sparingly to include extremities of bell curve, so that no player will be turned away based on skill.
   D. Unique bracketing structure & prize distribution.
   E. Standard Victory Condition on Standard Maps.

   Although no custom maps are available for Season 2, it is the hope of the *Alchemy Alliance* that the features listed above will compel further review of the details presented in this handbook.

4. **Tournament Host** – Direct questions/correspondence to TechChariot on discord.

5. **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.
   A. **Total Prize Pool** – The total prize pool for Alchemy League Season 2 shall be $100 USD, partitioned equally between Sprints 1 and 2 ($50 per sprint).
   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.
   C. **Distribution –** Per SPC-10, allowing for compensation of the top four Round Robin scores, with skill bias exponent of 2.

Bill of Materials:		*Alchemy AOE*	HDBK-L2	Revision
CH-01	Definitions			-
CH-03	Discord Server Rules			
SPC-10	Prize Distribution, Round Robin	Handbook, Alchemy League Season 2		
SPC-2	Calculation,Tournament Elo			
SPC-3	Elo Correction, Handicap	--------- Document Approvals ----------		Date:
		Prepared:	TechChariot	2024/03/15
		Checked:	Juicy45	2024/03/16
		Approved:	jc32990	2024/03/17
		Approved:	honeybadger1679	2024/03/17
		Used In:		
		Change Authority: N/A		Page 1 of 6

6. **Timeline –** Table 6 below defines important milestones for Season 2 of Alchemy League:

Start Date (YY-MM-DD)	End Date (YY-MM-DD)	Milestone(s):
~	24-03-17	Specifications Released
24-03-17	24-03-30	Registration
24-04-03	24-04-16	Round 1 (Sprint 1)
24-04-10	24-04-23	Round 2 (Sprint 1)
24-04-17	24-04-30	Round 3 (Sprint 1)
24-04-24	24-05-07	Round 4 (Sprint 1)
24-05-08	24-05-14	Rest Period
24-05-15	24-05-28	Round 5 (Sprint 2)
24-05-22	24-06-04	Round 6 (Sprint 2)
24-05-29	24-06-11	Round 7 (Sprint 2)
24-06-05	24-06-18	Round 8 (Sprint 2)

Table 6: Alchemy League Season 2 Timeline

7. **Bracketing Structure –** Alchemy League Season 2 shall match players according to a custom "nearest neighbor" method not available on "Challonge" or any other free online software.
   A. Eligibility to Register – Participants shall have 100 1v1 games minimum and win rate between 15% and 85% totaled across all accounts.
   B. Tournament Elo – Calculated from the most recent 50 1v1 games, linearly weighted per SPC-2. 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 ¾ point going from minimum to maximum.
   C. Number of Divisions – All players are competing for the same total prize pool.
   D. Nearest Neighbor 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 the nearest 2 (worst-case) or 4 (best-case) opponents. In this manner, it is impossible to be "bottom" or "top" of division without also being highest or lowest seed in the entire tournament.
   E. Handicap Correction – Although unlikely, it is possible that the tournament may not receive sufficient sign-ups to guarantee that the nearest 2 or 4 are within 200 tournament elo of any one player. Therefore, the methods of SPC-3 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).

8. **League Format –** Alchemy League Season 2 shall consist of a Round-Robin only – no elimination.
   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.
   B. **Set-Size –** Unless otherwise noted, each set in the Round-Robin is "Play-All-Two".
   C. **Civilizations –** There is no civilization draft. Prior to playing any games in the set, but before any map disclosure, players shall exchange direct messages, each globally banning two civilizations (for a total of four). Then, civilizations are free-pick, no repeat within the same set.
   D. **Map-Selection –** After the four global civilization bans are established but before any games are played, each player declares a home map among eligible maps. There is no "Map of the Week" or "Game 1 Map".

9. **Performance Tracking –** Participants give consent for their performance in Alchemy League to be tracked as a subject of intense public curiosity, particularly among competitors.

10. **General Rules –** The following general rules apply:
   A. **Higher-Seeds –** host all drafts and lobbies, and apply bans first, when applicable.
   B. **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: Standard maps should be designed to mitigate/eliminate the risk of needing restarts.
   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.
   D. **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.
   E. **Laming/Tower Rushes/Town Center Drops –** All 100% allowed. Creative strategies are important to the success of the League.
   F. **Nomad Unit Entrapment –** is not allowed. Trapping an enemy unit against a forest or another resource using quick-walling before minute 5 is forbidden.

11. 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 Map Pack]
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

12. **Standard Map Pool –** Alchemy League Season 2 is designed to give community members an opportunity to exhibit creative strategies on a standard map pool with unusual victory conditions.
    A. **Progressive Bans –** Each Sunday at 8pm East US time, starting on the 14th of April 2024, the organizer shall globally ban a map at random and effectively remove it from the tournament. This will apply to any Round played thereafter, as well as the current Round (for its few remaining days). If the set is started prior to the announcement of the ban, then the ban does not apply (E. G. A map banned during the first game is not banned for the second).
    B. **Starting List of Standard Maps:**
       1. **Black Forest**
       2. **Continental**
       3. **Fortress**
       4. **Hideout**
       5. **Highland**
       6. **Mediterranean**
       7. **Nile Delta**
       8. **Nomad**
       9. **Oasis**
       10. **Socotra**
       11. **Yucatan**

13. **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:
    A. Round Number
    B. @Player names
    C. Match Result (Use spoiler tag, sandwich between players)
    D. Names of maps that were played
    E. 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
    TechChariot_vs_BPDrej_G3.aoe2record

14. **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.

15. **Code of Conduct –** The requirements of CH-03 apply to all activities related to Alchemy League, including direct messaging and in-game chat.

16. **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:
    A. Make a credible pledge to meet the requirements of this handbook.
    B. Provide an honest estimation of their skill, so that we can be confident in our ability to find them worthy opponents.

17. **Registration** – Relevant links provided below:
    A. **To Sign Up – https://forms.gle/P1YsDC6SWeBPMhcn7**
    B. **To View Sign-ups – https://docs.google.com/spreadsheets/d/1QmtEelCx-6IHQJ4_-WYSU2CwOdcioX13E0XCpTc_Rt4/edit?resourcekey#gid=1379972397**

Revision	Description	Change Document	Date
Original Issue	---	N/A	2024/03/17