Team Feature Scope-of-Work

- ! Top Priority must-haves for Team Physics
- ~ Medium Priority very useful for Team Physics
- _ Low Priority requested for other courses

Facilitating New Team Features

- ! API: EdX currently provides some API access to team-related features, but these APIs
 are not documented or available to the outside world. To enable the creation of outside
 tools, all of the functionality of the teams feature will be available via properly authorized
 external API calls. This includes the existing functionality:
 - Getting the list of teams and team categories
 - Creating a team
 - Adding a learner to a team
 - o Removing a learner from a team
 - Getting the list of learners in a team
 - Getting the list of teams a learner is part of (see "Team History" feature below)
 - Deleting a team
 - Changing settings for a team (name, language, location, etc.)
 - ...as well as all of the new features described below, such as archiving, merging, changing course-wide team settings, etc.
- ! Team History: To allow learners access to their own work, each learner's profile data
 will include a list of teams to which they once belonged. This will be necessary for
 several of the features below.

Alterations and Additions to the Existing Teams Feature

- ~ Private Spaces: At the moment team discussions within edX are visible to other learners. To allow teams to hold private discussions and cut down on routes for academic dishonesty:
 - Staff will be able to make team discussions (and workspaces) private, restricting their visibility to team members and staff only.
 - This will be set on a course-wide basis.
 - Only current and former team members should be able to access private team discussions and workspaces.
- Restricted Mobility: Learners currently have the ability to join and leave teams freely.
 However, in some courses the staff may want to place learners into teams programmatically.

- Staff will be able to prevent learners from creating, leaving, and/or joining teams (each function separately), on a course-wide basis.
- The programmatic placement will be handled by the Team Maintenance Tool (see below).
- No Late Join: Learners could currently join teams that have already completed their tasks, potentially leading to cheating or confusion. To promote academic integrity and reduce learner frustration:
 - Staff will be able to set a length of time after which newly created teams cannot be joined.
 - Staff will set this as a number of days on a course-wide basis. The date will apply to every team.
 - Learners will not see teams which are past their late join date, or will see them as "locked". Staff will still be able to see all teams.
- Archiving: The current team deletion feature removes teams forever. Instructors may
 be reluctant to delete old teams, which clutters the interface as more teams are created,
 or they may delete teams that contain useful information that learners would like to
 review. To improve the learner experience in joining and leaving teams, and to make the
 teams feature more fault-tolerant, deletion will no longer be the default way to remove
 teams. Instead:
 - o Instructors will be able to *archive* teams.
 - Archived teams are removed from the list of active teams.
 - Archived teams have all learners removed from them.
 - Archived teams cannot be joined or posted to.
 - Archived teams are still accessible to staff and to learners who were in those teams.
 - Archived teams can be unarchived if the need arises, though learners who were previously in the team are not returned to it.
- **Consolidation:** Teams that lose several members may need to disband under the current structure. To help maintain team cohesion and promote feelings of community:
 - Staff will be able to merge two teams into a single team.
 - Both of the old teams will be archived.
 - All members of the previous teams will be moved to a new team.
- ! Notification: To reduce confusion and frustration:
 - Learners will be notified when their teams are archived or merged.
- ~ Job List: Teams are currently defined by a name, a location, and a language.
 However, there's no other indication to learners of which teams need their help or would be appropriate for them. To help learners find a team that fits their skills:
 - Staff will be able to set a specific list of skills for each category of teams.
 - When learners view the team list, each team will indicate which skills are required, and which have been filled by how many team members.
 - Learners will then select teams based on whether they believe they have the appropriate listed skills.

- Learners will indicate which skills they have when they enter a team, and can change this later.
- ~ Flagging: Not every team will work perfectly. To reduce and address behavioral problems:
 - Learners will be able to flag their own team as being in need of review by staff.
 - Staff will be able to filter the team list for flagged teams.

Team-Based Collaboration on the Wiki

- ! Team Workspaces: Currently all learners can view and edit all parts of the wiki. To better organize the wiki for collaboration, and to cut down on opportunities for academic dishonesty, each course's wiki will have team-specific spaces.
 - In all courses there will be a public wiki space that is readable and writeable by all learners, as is currently the case.
 - Team-specific spaces will automatically be created when new teams are created.
 - In a course where team discussions are publicly visible, all learners will be able to see all parts of the wiki, including those from other teams.
 - In a course with private team discussions, learners will only be able to see the public space and the team spaces for their current and prior teams.
 - In either case, learners will only be able to edit the public space and pages within the space for their current team.
- ! Image Upload: Currently edX allows file uploads from learners only in peer-graded assignments. To allow collaboration on a wider variety of topics, students will be able to upload image files to include in the wiki.
- ~ Discussion Link: Team discussions and team wiki spaces will automatically contain links to each other.

A Team Maintenance Tool

- **Uses APIs:** This tool will call the team APIs mentioned above to complete its tasks. It might run outside of edX, or might be accessible as a tab in the instructor interface.
- _ Custom Team Assignment: Course staff currently cannot place learners in teams. To allow staff to control team makeup:
 - Staff will be able to place learners into teams one at a time.
 - Staff will be able to feed this tool spreadsheets to assign learners to teams en masse.
- **Declutter:** The current team interface can become unwieldy once there are dozens of teams. To reduce interface clutter for learners:
 - o This tool will be able to quickly archive groups of teams.

- Teams will be archived based on specific criteria: the age of the team, the time since the last activity in the team discussions, or the number of learners left in the team.
- Staff will be able to activate this function on demand, or set a schedule and run this tool regularly.

A Team Evaluation Tool

- **Uses APIs:** This tool will call the team APIs mentioned above to complete its tasks. It would probably work best as an LTI tool.
- ! Team Evaluation: EdX students can currently only grade one another using the Open Response tool (designed for peer-graded essays). This is awkward to use for quick evaluations. In this tool:
 - Learners will evaluate everyone on their teams (including themselves) on their performance in specific staff-generated categories.
 - Staff can allow freely chosen Likert-scale responses, or set the activity to be a zero-sum game, in which one learner doing better means that another must have done worse.
- ! Gradeable: Evaluation carries little weight unless it impacts student grades. To make the consequences of learner actions more real:
 - Staff can set this tool to deliver grades to learners based on their ratings.
 - To encourage honest self-evaluations, learners will receive a bonus to their score if their evaluations of themselves are close to how other rate them.
- ~ Helping Low-Rated Learners: To facilitate course oversight in SPOCs:
 - Staff will be able to obtain a list of learners whose evaluations are low.
 - This list should include all instances of this tool in a particular course, so that staff can tell whether learners are consistently low-rated.
- ~ Staff Grade Adjustment: To facilitate course oversight in SPOCs, staff will be able to adjust learner ratings.
- ! Limited to Specific Groups: To ensure that teams can only evaluate each other on their current project, this tool will only accept input from learners who are currently a member of a team in a particular group.

A Team Decision Tool

- **Uses APIs:** This tool will call the team APIs mentioned above to complete its tasks. It could work as an LTI tool or as an XBlock.
- ! Team Decision-Making: Part of teamwork is coming to a decision and committing to it. In this tool:
 - Learners select a particular response to a multiple-choice question. This may be a subject-matter question, or a simple "we ready to move on" decision.

- This problem may be graded.
- Staff may choose to award individual credit only, team credit only, or a split (team members whose vote differ from the consensus receive half credit for a correct answer).
- ! Delayed Reporting: Scores are only reported to learners and sent to edX once 100% of the team has responded, or one day after 60% of the team has responded, whichever comes first.
- ! Limited to Specific Groups: To ensure that teams can only evaluate each other on their current project, this tool will only accept input from learners who are currently a member of a team in a particular group.

New Open Response Features

- _ Open Response Audience Restriction: Open Response Assessments (ORA)
 currently can be assigned to any learner in the course. To facilitate complex feedback
 within teams:
 - Staff will be able to restrict open response questions so that only a learner's teammates will receive their submission to grade.
 - Alternatively, staff will be able to set open response questions so that only learners *not* on the same team will receive a submission to grade, so that team members will not accidentally receive each others' work to grade.
- _ Open Response Team Identities: Learners are currently anonymous in ORA. To facilitate feedback within teams:
 - Staff will be able to set open response questions to show usernames to learners on the same team.
 - Learners will see only usernames, with a link to the existing edX student profile, not any other information.
- _ Open Response Honesty Bonus: To encourage honest self-evaluations, learners will receive a bonus to their score if they rate themselves close to how other rate them.
- _ Open Response Grading Fix: Peer-graded questions currently discard responses beyond a certain number, rather than using them to improve the accuracy of grading. This should be fixed so that all responses are used.

Additional Teams-Related Features

 Insights: To facilitate course oversight in SPOCs, data reported in edX Insights will be filterable by team or team category.