

BOW Sports Capital — The Curve Room (301 M1L2) Purpose: The Curve Room is an interactive cap/contract strategy module where users manage three franchises (MLB, NFL, NBA) simultaneously. Each league has different payroll/cap mechanics, and users must sequence decisions to "shape" each payroll curve (build → peak → reset). Mechanics: • Delivered through Google Forms for the UX. • Each section corresponds to a league (MLB → NFL → NBA) with 3 sequential decision nodes each. • Each node alters the trajectory of cap/ARB/extension curves implicitly. League Roles: • MLB – arbitration + extensions for a small-market club • NFL – rookie-QB window + cap rollover timing • NBA – luxury tax + supermax + second apron Outcome & Scoring Engine: • User responses are written to Google Sheets. • Apps Script maps each response to a hidden Curves sheet. • Formulas calculate whether curves remain balanced across leagues. • System defines a PASS when all three curves achieve proper sequencing. • FAIL occurs when timing misaligns (e.g., pushing in too early, no reset period). Email & Claim Codes: • Apps Script emails users their results + chart image of payroll curves. • PASS generates a Claim Code for XP / Gauntlet tracking. • FAIL suggests retry & gives hints. Attached Script (Simplified Explanation): onFormSubmit(): - grabs last Form response - maps decisions → Curves!L2-U2 - flushes calculations - generates email via sendEmailResult() sendEmailResult(): - reads PASS/FAIL from Curves!L2 - attaches published chart - sends Claim Code if PASS - gives retry hint if FAIL Design Intent: This module is part of BOW 301 ("Front Office Systems"). The goal is to demonstrate that sequencing of spending matters as much as total dollars—cap windows, arbitration waves, and tax aprons reward teams that peak at the right time. Educational Outcome: Students learn cross-league cap mechanics: • MLB = nonlinear arbitration inflation + staggered extensions • NFL = asymmetric rookie-QB surplus + rollover cap jumps • NBA = convex luxury tax + apron penalties + supermax leverage Planned Expansion: Future module will incorporate stochastic performance + playoff revenue + rollover cash + trade markets. This becomes the SEE Offseason Loop.