Recorded Lectures

1. March 28, 2022. [Course Introduction.](https://washington.zoom.us/rec/play/s20C0HyIlobOfoGyljp6913Ugc1J7pgbhHYA3FmwVf7Kg82EPJY05jGxNu4ZyRRgHTl7LP_Zi5pXz_2U.Ryg71UGF-5zvOIn9?continueMode=true)
2. March 30, 2022. [Modeling Reaction Networks](https://washington.zoom.us/rec/play/Mgppdec39OCTJaRv3kxOl41Beab8mD0S4m9K5tXtDrzYuDQK1e_r4MRFRKjP7MEChDuir9ipz-lifJKy.AEvzXOLmBztArc-l?continueMode=true)
3. April 1, 2022. [Python Review](https://washington.zoom.us/rec/play/nXJduIh7amPzF6rkyApmB7flzWjlJGEpoJikBzZliNg5XHh3SpL8_ryvU0eQgLXIoqsdFEujCUJM_2PK.WoZc9ybKTQ-xUEBo?autoplay=true&startTime=1648842608000)
4. April 4, 2022. [Geometric Linear Algebra](https://washington.zoom.us/rec/play/xdDlaWchqi6XlwSy-vnHh2GuwSRtI86XuESPKvgfjf3bJtKmg4xNUPqf0DyPMRaWbxlDWapnbYdA90Oj.YtMii9VVQ6iEKCVI?autoplay=true&startTime=1649104245000)
5. April 6, 2022. [Dynamical Systems](https://washington.zoom.us/rec/play/fscjks6gMJgYBzSzgssGLCKxe83TtqtTwDI1Bg1M7zLvK5MrRlUKCYXQcI7clOh7Z8QozvDEpUt_DdQu.bSOpxDAQRIiVz2lQ?autoplay=true&startTime=1649276501000)
6. April 8, 2022. [CalTech Control Package](https://washington.zoom.us/rec/play/RaM3QLdLAny-F2C3e8730OfoWRVW0Gg0YcdnIWNjpAeuEMWWMaoS-6feus6opifYsiEDKIWsXw2_JgPQ.zHHI1cMSHaGBxYlt?autoplay=true&startTime=1649446846000)
7. April 11, 2022. [Laplace Transform Theory](https://washington.zoom.us/rec/play/rRaFxQtxT6TH2dJ8kZtIWRITm-P1ooQmhaCc2uLO4e2wfyrpzEMe8-uBv2sz7ylIfD1SHuL02d6SRwQW.3BkiGc61xcoDCqNf?autoplay=true&startTime=1649709007000): Part 1
8. April 13, 2022 [Laplace Transform Theory: Part 2](https://washington.zoom.us/rec/play/03gAEpoQQilZ7frujGQSrd5iqKrlpX6kfA-v839yzPIcWP9p99Imn8UKML55Vi0aY3RuIbNY_WdoIZSz.BXvig6x1cAKwoviy?autoplay=true&startTime=1649881865000)
9. April 15, 2022 [Accuracy of Linear Approximations](https://washington.zoom.us/rec/play/WzAEDjFpQ8TcYBE3s5HTBIKgoMPGCYpMySc6RemKlMqXiYY6hlC2OiHW6zF1CWkjIEK0mkFHt4SvVjci.ZchJTyVbVwF15BHi?autoplay=true&startTime=1650053207000)
10. April 18, 2022 [Practice Constructing Transfer Functions of Reaction Networks](https://washington.zoom.us/rec/play/dobF50XeZ4FykLiBk98aK8KCyviSg1_TLDsv4U5C8T9bjL9cCWNNPqnUlMChOnWVmWN3LEi0Ffjar6e6.MavgVd1OPziHMLNh?autoplay=true&startTime=1650313692000): Part 1
11. April 20, 2022 [Practice Constructing Transfer Functions of Reaction Networks: Part 2](https://washington.zoom.us/rec/play/PsC3ydGylgctDfV5Ct9yF2_i1Ly7bhOVYbZhq7fFCfWdZ6jNuY2uiToJs8_1lwlCOoWQ-NvJS5K-Cx7H.Xe52Tk_0mv5ROA6U?autoplay=true&startTime=1650484482000) (start at 47 min)
12. April 22, 2022 [Controllability of Biological Systems](https://washington.zoom.us/rec/play/ZBgmutlaWFojHxsmynGgD_2IAPAoV6NGab-bGJLtDVvYjVkazdZVA3GpVh_U6QilcixmDXsAalTNJ3k.W92pF0Dan4e85g1A?autoplay=true&startTime=1650655917000)
13. April 25, 2022 [Closed Loop Systems](https://washington.zoom.us/rec/play/1ZMhYaiAWayRTqnB1LLseM0_Vhaanbi9nLa-D6n4wBBu4RXWd7dP6-Jd1L_s4Az4pJMxaXNxgAkz0AC4.nJVvWmHftgNCftGi?autoplay=true&startTime=1650918667000) - Part 1
14. April 27, 2022 [Closed Loop Systems - Part 2](https://washington.zoom.us/rec/play/eRY9wFOxQq6JbmNGjGJCgNgZEz31WQBkVqWbEBXgQukvZL9EXE5htN7koUWtKoIjKRCZPr4qZX1NlHx0.1yQ7Jv89N0an2wOo?autoplay=true&startTime=1651091420000)
15. Apr 29, 2022Evaluating closed loop systems - part 1. (No recording. Student workshop)
16. May 2, 2022[Evaluating closed loop systems - Part 2.](https://washington.zoom.us/rec/play/bnslHQ5wPOwhHxHYW_ObHIK8lfCEOQ8z1moEpJj4E8OySfiix485plzJx0f2dzWR-wsCzudXXws63jX7.qCKYU4MFfWH6oMfP?autoplay=true&startTime=1651523468000)
17. May 4, 2022 [From Thought to Code](https://washington.zoom.us/rec/play/A6nciQ4AP-IDj3Km7I_PtQKUgHgbH14d2tqPsPWBLPntt91cT41hf2S5s2VQdrg9TNVO8x-oczxXhTwY.vtymL675HYJFAY2O?autoplay=true&startTime=1651696230000)
18. May 6, 2022 [Building an Evaluation Testbed](https://washington.zoom.us/rec/play/SyfxUrp-2p-I84TUBMJWxNnkP6Ziz7P8MxyuQwLKSS5nEcpzrUiHCqsCX68egywi4co7VXxhZ5MdBefa.vixII69arClkhvOI?autoplay=true&startTime=1651865490000)
19. May 9, 2022 [Basic Controllers - Part 1](https://washington.zoom.us/rec/play/rD9RFks3gXM-eM772zZu8Vd5w-4nDrYVpaPETW2-I-5sMZ3J0BTADHFzJG7UUmhlWhDhzUceiFV01IE.5RVGKiJbiphqm4mq?autoplay=true&startTime=1652128270000)
20. May 11, 2022 [Basic Controllers - Part 2](https://washington.zoom.us/rec/play/jtoCVw1HD0FIccKdwFICgRwrIhvLtIxm5tyRD0m9xNiCqWciQjl2CKCurDv7-UjhquXFXUtWhQtGror6.OqGWd-djgvdrIZz9?autoplay=true&startTime=1652300881000)
21. May 13, 2022 [Practice designing closed loop systems](https://washington.zoom.us/rec/play/ffYoP9s5SXMBGE6PTDR0H4flxiLVrDVoji3uUuEOUMlvUHXy-cumsHUNAxszDT630zaGe9KVPGsHxQ_D.frUrZeM4TF4s3PfS?autoplay=true&startTime=1652470275000)
22. May 16, 2022  [Full State Feedback - Part 1](https://washington.zoom.us/rec/play/rbvLesDRSz49WZJx-gccWCMO6Awsnp5hjcfuthibz0_0xNIIJs8fFUlDTlBOwtWI1KdXRxzfxThXj7Vw.aMpm-F8hS4eburAq?autoplay=true&startTime=1652732992000)
23. May 18, 2022 [Full State Feedback - Part 2](https://washington.zoom.us/rec/play/N2vMrkgPKLofcKs3JE9pECQ-sQdmmA_6HTGgxY9tZ7ac8I-2rhHyLYCAMG5Z6QSkSBRNXW6-7Thdr-Y2.OWX-PooDn0H2bFsJ?autoplay=true&startTime=1652905882000)
24. May 20, 2022 [Testbed for Full State Feedback - Part 1](https://washington.zoom.us/rec/play/dyYgrXLRp0S9nZ2yKYdPhlA4IuhEW2bk_PJCgU57DE2btaHW0N5SPGXFOVJQfpYHz6WHh0dLoQvHdaw5.7SN07cAyhxhC3OPJ?autoplay=true&startTime=1653075229000)
25. May 23, 2022 [Testbed for Full State Feedback - Part 2](https://washington.zoom.us/rec/play/LD16RzK1pT7wB_Dqtp4_t4UsDfjMRKA8XdqwpqgRe7ahatcvQkytoDvI345IAqr_I0pmyPCye1IIVv5i.HFT0N3PS-Ex2ACe_?autoplay=true&startTime=1653337820000)
26. May 25, 2022 [Survey of Closed Loop Systems](https://washington.zoom.us/rec/play/rgBL-W_zEIUOMUqM5BrqGeuDUYV5APPQl0kn1zGHSNno9r_4v_Dph4X3AyGfHWVf0Dln-1PIJiSw0nWy.u6ACxOnMoqzIdep1?autoplay=true&startTime=1653510604000)
27. May 27, 2022 [Workflow for Designing Closed Loop Systems](https://washington.zoom.us/rec/play/y5cZQFn8V4zSpLhLC5-j43rzALHwgIXC8YfBApo8QYADu_MpWJnS-YQvb5wGMD-o7bsxF3d5sVJPSx8s.JLEQHErVog-glxyx?autoplay=true&startTime=1653679974000)
28. June 1, 2022 [Student Presentations - Part 1](https://washington.zoom.us/rec/play/MRDfz_T8xDtlkBkY3EhxRvjq8LIZsIWgWZnJlLD5kYirbqlDtlNu8As6WzxrQ9IRxfDVt270BSc2EZUY.n5xGD4XKajd9lYe7?autoplay=true&startTime=1654115138000)
29. June 3, 2022 Student Presentations - Part 2