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MSE 120 - MATERIALS PRODUCTION (3 UNITS) COURSE OVERVIEW

SUMMARY

Economic and technological significance of metals and other materials. Elementary geology (composition of lithosphere, mineralization). Short survey of mining and mineral processing techniques. Review of chemical thermodynamics and reaction kinetics. Principles of process engineering including material, heat, and mechanical energy balances. Elementary heat transfer, fluid flow, and mass transfer. Electrolytic production and refining of metals. Vapor techniques for production of metals and coatings.

PREREQUISITES

Engineering 115, Mechanical Engineering 40, Chemical Engineering 141, Chemistry 120B or equivalent thermodynamics course

Fall only

WORKLOAD

TIME COMMITMENT

3 hours of lecture per week.

COLLEGE OF CHEMISTRY PEER SERVICES

Made by Angela Lee, c/o 2019



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