MSE Laboratory course for Introduction to TEM

Fall 2017

Instructor: Dr. John Dunlap

# students: 12

This lab course would be in sync with the Intro to TEM Course by Gerd Duscher.

12 students in 3 groups a 4 students would have a 3 hours per week lab course.

Proposed content on the TEM:

2 sessions: Introduction to the TEM

3 sessions: Diffraction (SAD and CBED)

3 session: Imaging (Conventional, High resolution, STEM)

1 session: EELS

1 session: Exam (qualification as user included)

Proposed Content Classroom:

2 sessions: Data Analysis (Imaging, Diffraction)

Costs to the department:

1 Lecturer ( Dr. Dunlap)

1 TA

TEM costs ($45/h): $ 4050

TEM costs –free training sessions of new users (4h/user) : $1890

TEM costs for a possible projects (2 students/group): $1080