

Atoms at Work Summer Camp

Emergency Contact:

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Monday, June 17, 2024

9:00 am – 9:30 am	Welcoming and initial introductions - Everyone	WALC 3084
9:30 am – 10:20 am	Introduction to radiation lecture – Andrew St. Aubin	WALC 3084
10:30 am – 11:20 am	Detector basics and shielding lecture - Hannah Pike	WALC 3084
11:30 am – 12:10 pm	Faculty research presentation - Dr. Allen Garner	LMBS 5281S
12:10 pm – 1:10 pm	Lunch Break	
1:15 pm – 2:15 pm	Reactor and NERL tour - True Miller, Riley Madden, Brian Jowers	BHEE B073
2:15 pm – 4:00 pm	Cloud chamber activity and measuring radiation lab, outside detector measurements - All student helpers	BHEE B073

Tuesday, June 18, 2024

9:00 am – 9:50 am	Half-lives, Isotopes, cross-sections, and radiation interactions lecture - Dylan Johnson	WALC 3084
10:00 am – 10:50 am	Neutron Activation, source activity, gamma spectroscopy and nuclear fuel lecture - Riley Madden	WALC 3084
11:00 am – 12:00 pm	Dr. Revankar lab tour and laminar flow around bodies demonstration - Asif Anwar	BHEE B086
12:00 pm – 1:00 pm	Lunch Break	
1:00 pm – 2:20 pm	Gamma attenuation lab - All student helpers	BHEE B073
2:30 pm – 4:00 pm	Half-life determination from sub-critical pile samples - All student helpers	BHEE B073
8:00pm -10:30 pm	Movie Night – ADVENTURES OF A MATHEMATICIAN	WALC 1055

Wednesday, June 19, 2024

9:00 am – 9:40 am	Fission, fusion, nuclear terminology, and simplified reactor physics lecture – Riley Madden	WALC 3084
9:50 am – 10:30 am	Power production, reactor types and neutron detectors – Dylan Johnson	WALC 3084
10:30 am – 12:00 pm	Thermal Hydraulics Research Facility presentation and tour – David Kang, Adam Dix	WALC 3084
12:00 pm – 1:00 pm	Lunch Break	
1:00 pm – 2:20 pm	Subcritical multiplication lab - All student helpers	BHEE B073
2:30 pm – 4:00 pm	Subcritical pile flux measurement lab - All student helpers	BHEE B073
4:00 pm – 4:15 pm	Load vans to cookout	
4:15 pm – 6:30 pm	Cookout at Happy Hollow Park	Happy Hollow Park

Thursday, June 20, 2024

9:00 am – 9:50 am	Power production continued, SMR's and advanced reactors, nuclear fuel cycle – Hannah Pike	WALC 3084
10:00 am – 10:50 am	Additional uses of nuclear, PUR-1, ALARA refresher and HPGe and Maestro software basics lecture - William Richards	WALC 3084
11:00 am – 12:00 pm	Faculty research presentation - Dr. Stylianos Chatzidakis / Brad McDaniel intro to NE major – Hannah Pike, Riley, William Richards	LMBS 5281S
12:00 pm – 1:00 pm	Lunch Break	
1:00 pm – 3:00 pm	Unknown sample irradiation in PUR-1 lab/Tours - All student helpers	BHEE B073
3:00 pm – 4:00 pm	COE presentation, concluding remarks, townhall setting - Everyone	BHEE 170

Friday, June 21, 2024

8:00 am - 8:30 am	Load Buses - Everyone
8:30 am -10:30 am (EST)	Travel to Clinton Nuclear Power Plant
9:30 am – 2:00 pm (CST)	Tour of Clinton Nuclear Power Plant
3:00 pm – 5:00 pm (EST)	Travel back to Purdue and drop off at dorms