Sample Physics Major Program for Clark Honors College Students

	Physics Major Core Minimum of B.S.	Robert D. Clark Honor College	Required and Optional Related Subjects	Undergraduate Research Activities
First Year	Foundations of Physics I (251,252,253 or 251H, 252H, 253) Physics Lab 1 (290 each term) **15 credits**	Honors College: Literature (221H, 222H, 223H) **12 credits**	Math: Calculus (MATH 251, 252, 253) or Honors Calculus (MATH 261,262,263) If AP Calculus AB 4-5, Calculus III (253) and Intro Diff. Eqns (256) Chemistry: (CH 221, 222 or 225, 226) (can be taken year 2) **12-20 credits**	{ For advanced students… ♦ Apply for NSF REU during winter term ♦ Complete REU, summer afterwards }
Second Year	Foundations of Physics II (351,352,353) Intermediate Laboratory (390, one term) **16 credits**	Honors College: History (231H, 232H, 233H) HC Colloquia (e.g., HC 421H, 431H, 441H) **16-24 credits**	Math: Intro Diff. Eqns (256, Calc. Sev. Variables, 281, 282) Chemistry: (CH 221, 222 or 225, 226) (can be taken year 1) **12-20 credits**	♦ Apply for NSF REU (see http://www.nsf.gov/crssprgm/reu/reu_search.cfm) during winter term ♦ Complete REU, summer afterwards
Third Year	Electricity, Magnetism & Electromagnetism (412,413,422) 6 cr. hours upper-division labs (e.g., 431, 432) Research (401) **22 credits**	HC Colloquia (e.g., HC 421H, 431H, 441H) to total 5 courses between 2nd, 3rd and 4th year. **8-12 credits**	Multicultural Courses (2 courses) Math Methods for Physics (410) { Optional electives in Mathematics (from Complex Variables, Partial Diff. Equations, Linear Algebra) } **12+ credits**	♦ Begin research with physics research group fall or winter term (c.f. http://hendrix2.uoregon.edu/~dlivelyb/UOPhys_UGrad/UO_Physics_UGrad_research.html) ♦ Continue research through following summer and fall.
Fourth Year	Quantum Physics (414,415,417) Mechanics (411) Research (401) **20 credits**	HC Colloquia (e.g., HC 421H, 431H, 441H) to total 5 courses between 2nd, 3rd and 4th year. HC Thesis Prospectus (HC 477H) **6 credits**	{ Optional electives in Physics (e.g., 410, 424-26, 427) and Mathematics (see above) } **4-12 credits**	♦ Write Honors College Thesis (in physics research area) during fall/winter terms. Defend during spring term.