

ENGG 197 Syllabus
Ph.D. Professional Workshops
Instructor: B. Pogue

Offered: 08W: Thursday mornings, 9:00-noon, Jackson Conference room

A sequence workshops on the preparation for professional life after the PhD program, culminating in the completion of a curriculum vitae or a resume, outline of possible jobs and a competitive grant proposal or business plan. A major goal is for the student to design and write a grant for a technology startup program or for an academic research grant. Successful research and SBIR proposals are outlined and the processes for evaluating them are offered by research principal investigators, grant administration officials, and corporate representatives. Both academic CVs and industry resumes can be developed. Workshops include, job search guides, research team management, negotiating contracts and teaching. Submitted student proposals and CVs are critiqued for improvement.

The workshop is required for Ph.D. students; it may not be counted toward fulfilling the requirements for the A.B., B.E., M.E.M., or M.S. degrees.

Course Director: MS/PhD Program Director

Workshop 1 Jan 10; 9:00-10:30am

“Discussion of Ph.D. studies & the afterlife”
Brian Pogue

Workshop 2 Jan 17; 9:00-noon

“University Research Proposals, Grants and Technology Transfer”
William Ploog, Sponsored Projects
Glennis Gold, Technology Transfer
Mark Mounts, Dartmouth Library
Prof. C. Barlowe, Dean Dartmouth Graduate Studies
Holly Wilkinson, Thayer Career Services

ASSIGNMENT 1: Create a list of 10 possible job sites using the Library search tools (agencies, institutions, companies, research groups)

(If companies, you must show data on the company. If universities, you must mention how your expertise would fit with department. Approximately 1 page per job is required.)

Workshop 3 January 24; 9:00-noon

“Basic Research Proposals”
Prof. Brian Pogue, Thayer (NIH grants)
Prof. Ian Baker, Thayer (NSF grants)
Prof. Steve Taylor, Thayer (DARPA programs)
Prof Gene Santos, Thayer (DoD grants)

ASSIGNMENT 2: Describe your possible research grant (one page single spaced).

Workshop 4 January 31, 9:00-noon

“Entrepreneurship, Technology Start Ups & Intellectual Property”
G.Fairbrothers, DEN, Tuck
Phil Firneau, Borealis Ventures (unconfirmed)
William Loginov, LLP, patent attorney

ASSIGNMENT 3: Outline a possible business based upon your research (one page single spaced).

Workshop 5 February 7, 9:00-noon

“Small Business Innovation Research Proposals”

Dr William Haines, National Science Foundation,

Robert Dalton NH Innovation Research Council Director,

Mark Blanchard, Technology Development Advisor, Vt SBDC, VT EPSCoR Program

Paul Meaney, MIST Inc & Thayer School of Engineering

Brian Pogue, Thayer School of Engineering

Hillary White, Dartmouth Medical School

ASSIGNMENT 4: Describe a possible small business grant based upon your research area, include basic specific aims & rough budget – (one page single spaced)

Workshop 6 February 14, 9:00-noon

“CVs & Resumes: Industry & Academic job search”

Holly Wilkinson- Thayer Career Services - Resumes & Industry Job Search

Kerry Landers – Dartmouth Grad Studies – Academic CVs

Brian Pogue – Thayer – The Academic Job Search

ASSIGNMENT 5: Create Academic CV or Industry Resume

Workshop 7 February 21, 9:00-11:00

“Exploring Teaching and Learning for Academic Jobs”

Dr. Vicki May, Ph.D. – DCAL

Eric Hansen – Thayer teaching experience

ASSIGNMENT 6: Preliminary outline of grant or business plan due (one page)

Workshop 8 February 28, 9:00-noon

“Research Leadership & Industry Sponsorship”

Prof. Bob Graves - “Research Team Design & Management”

Prof. C. Sullivan - “Industry sponsorship of academic research”

Week 9 - March 6

**ASSIGNMENT 8: The Forms needed for grant are due
(cover page, personnel listing, budget)**

End of Spring term - ASSIGNMENT 9: Final grant or business plan due

Students will be provided with written and verbal feedback on all. Students are encouraged to write up a proposal which they actually intend to submit for post-doctoral/business funding, job or apply for business funding.

Student Evaluation: Pass / Fail

The *Dartmouth Honor Code* applies to all submitted work in this class. All work submitted must be entirely your own, or have direct references for any materials used from another source. Violation of the Honor code, such as plagiarism of written material, can result in suspension or dismissal from the college. See the url: <http://www.dartmouth.edu/~sources/> for further details on referencing.