

Managing Individualized Capstone Experiences in a Large Department

C. M. Wood, D. M. Denbow, D. E. Eversole, M. A. McCann, A. P. McElroy, R. K. Splan, and N. M. Tamim





APSC Undergraduates

- > 500 majors
- ≥ 85 85 85 85







APSC Capstone Experience

- Graduation requirement
- Implemented for Class of 2011
- > Two credits, Senior or Graduate course
- > Project-based, faculty-approved
 - > Internships
 - Undergraduate Research
 - Study Abroad
 - **►** Independent Studies
 - > Formal Courses







APSC Capstone Experience

- Learning Objectives
 - > teamwork
 - problem-solving
 - critical thinking



- improved communication skills
- preparation for post-graduation success
- a sense of the bigger picture







"Umbrella" Course (APSC 4954)

- Developed for students completing an individualized capstone experience
 - ➤ On-site supervisor
 - Faculty supervisor
 - Mostly internships
 - Some independent studies/un
 - Offered Fall and Spring
 - Culminates in a poster symposium







Capstone Experiences by Term

Number of Capstone Proposals Submitted and Number of Students Enrolled in APSC 4954

Term	Proposals	APSC 4954
Fall 2010	61	11
Spr 2011	32	14
Fall 2011	82	33
Spr 2012	51	11
Fall 2012	94	44
Spr 2013	55	9
Fall 2013	64	27

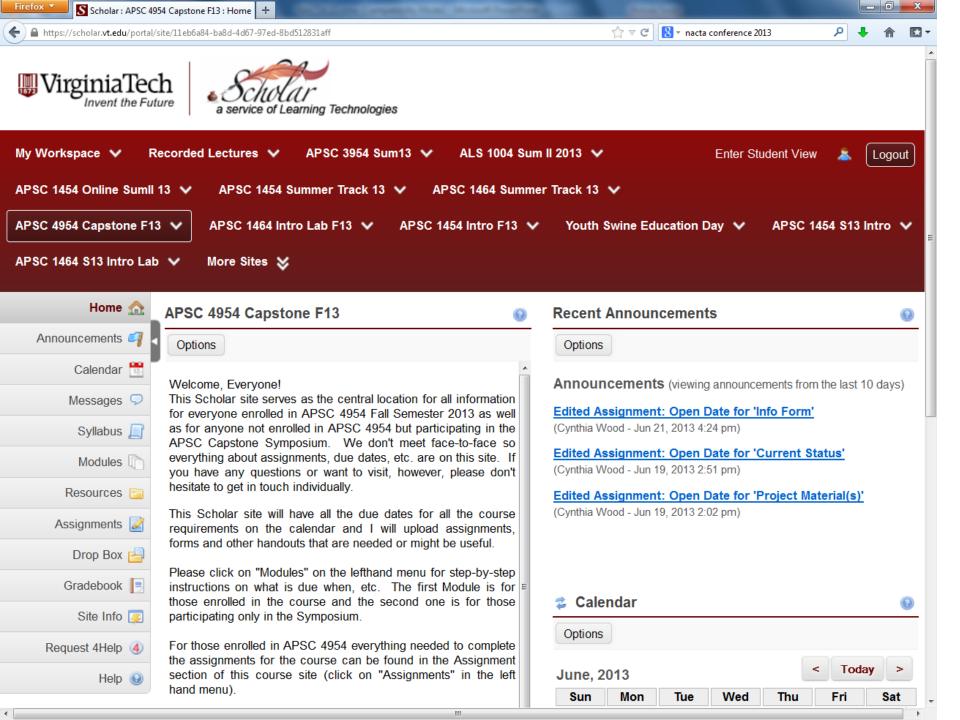
Sciences Department

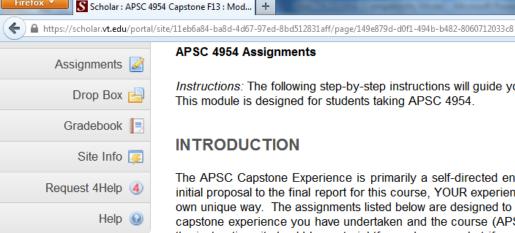






- Virginia Tech's implementation of Sakai, an open-source learning and collaboration management system
 - Replaced Blackboard
 - Includes project sites, ePortfolio sites and course sites
- Course site is used to manage individualized capstone experiences





APSC 4954 Assignments

Instructions: The following step-by-step instructions will guide you through the requirements for successfully completing APSC 4954. This module is designed for students taking APSC 4954.

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INTRODUCTION

The APSC Capstone Experience is primarily a self-directed endeavor with a very well defined set of objectives to achieve. From the initial proposal to the final report for this course, YOUR experience should be directed to accomplishing the objectives listed below in its own unique way. The assignments listed below are designed to help you stay on track to having a positive outcome both in terms of the capstone experience you have undertaken and the course (APSC 4954) by which credit is awarded for that experience. If you follow the instructions it should be a straightforward process but if you have any questions or concerns at all please do not hesitate to get in touch with me. All my contact information is found in the syllabus and on the "home" section of this course site.

Best wishes for a successful experience! - Dr .Wood

LEARNING OBJECTIVES

Upon completion of the capstone experience, students will have integrated new skills and knowledge with skills and knowledge previously attained by accomplishing at least five of the following seven learning objectives:

- 1. analyze, interpret, and synthesize information from a variety of sources;
- solve "real-world" problems in "real-world" situations;
- 3. improve verbal, visual, and written communication skills;
- practice critical thinking skills;
- be a contributing member to a team effort;
- gain an understanding of the "bigger picture"; and
- enhance self-confidence and preparation for a career and/or post-baccalaureate education.

ASSIGNMENTS

Details about all of the following assignments are found in the **Assignments** section of the course site. Click on *Assignments* on the left hand menu to access them. All completed assignments will be uploaded into Scholar via their respective assignments in the Assignment section (except the Supervisor Report, which is sent directly to me). DO NOT use the drop box as I cannot assign a grade directly from there. The assignments are pretty much in chronological order by due date but you may want to start some sooner than others.

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Assignment 1 (15 pt): Individual Experience Information Form (Due June 5). This form provides information about your start and end dates, supervisor contact information and a brief description of your capstone experience and project. This form will help me keep track of how things should be going and how to get in touch with your supervisor. Limit to one page. See "Assignments" on Scholar for details.

Assignment 2 (25 pt): Current Status (due one week after starting your capstone). This is a one-page summary of how your capstone is going. See the Assignment on Scholar for details. Include in your summary the date you expect to be finished with your project and your experience.

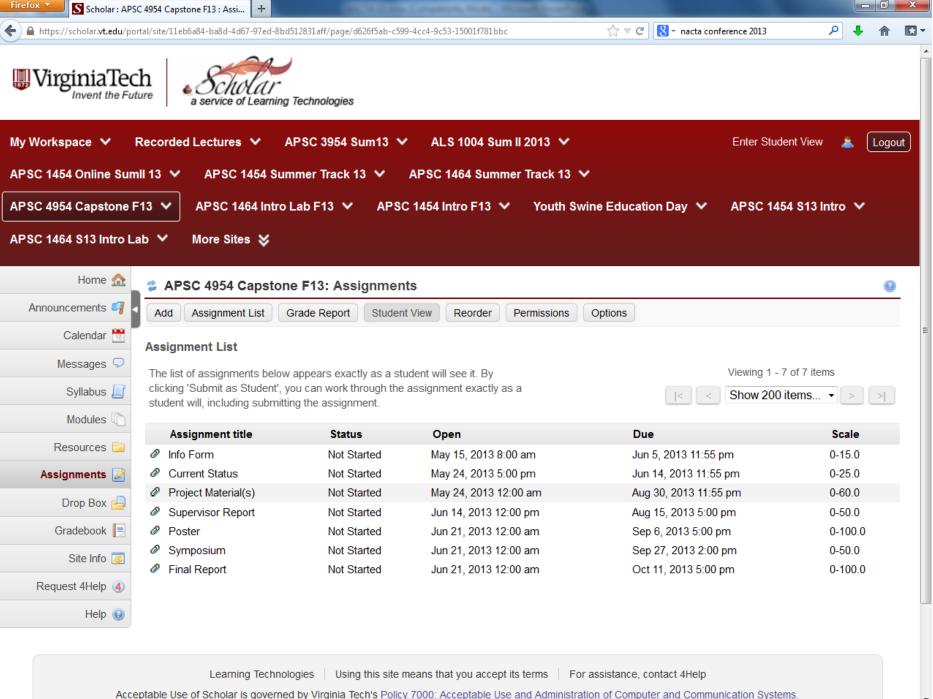
Assignment 3 (10+50 pt): Project Material(s) (initial proposal due two weeks after starting the capstone; final submission due within two weeks of completing your project). This will likely be different for each person and depends fully on what your project is. If you need help with this please let me know as soon as possible. Details are under "Assignments".

Assignment 4 (50 pt): Supervisor Report (due as soon as possible once your capstone experience is completed): This evaluation by your supervisor does not impact your grade very much one way or the other but it is vital in terms of feedback for you and for the capstone program. It needs to be filled out by your supervisor at the conclusion of your capstone experience and sent to me.

Assignment 5 (100 pt): Capstone Poster (Due September 6): Everyone will prepare a poster presentation using Powerpoint (see details on Scholar under *Assignments*). If you want to include additional items, let me know what you have in mind. Tables are available if needed.

Assignment 6 (50 pt): Capstone Symposium (September 27, 2:30-4:00 PM): You are required to participate in the Capstone Symposium, which will be held on the first floor of Litton Reaves Hall. These poster presentations have proven very successful and we are looking forward to another great symposium. Details are posted under Assignments.

Assignment 7 (100 pt): Final Report (Due October 11). This report (5-6 pages double spaced) is not the same one you might prepare as part of your project. This report should include a summary of your activities, accomplishments and challenges throughout your experience. It should also include details about how your experience met (or failed to meet) the learning objectives outlined in the capstone guidelines. Also include feedback on the symposium and suggestions for future students who might want to follow your footsteps. Details are under Assignments.



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Capstone Symposium



"I was surprised by how much I enjoyed the capstone symposium. I was impressed by my classmate's projects and the time and determination many of them dedicated. During the symposium, the time passed quickly and I was excited to share my project with interested underclassmen."



Student Feedback

- Course evaluations have improved
 - > 3.1/4.0 in Fall 2010, 3.5/4.0 in Fall 2012
- Learning objectives have been met
 - > 98% met 5 of 7, 43% met all 7

"I gained confidence in myself in being able to manage a real event, and being treated like an adult in charge for the first time. I feel more professional with myself and my ability to be a leader. Overall my capstone experience gave back to me more than I expected."







Thank you!

