PROVOST INSTRUCTION 1531.79C

From: Provost, U.S. Naval Academy

Subj: MIDSHIPMAN RESEARCH COURSES

Ref: (a) PROVOSTINST 1531.68D Trident Scholar Program
     (b) PROVOSTINST 1531.82 Course Policy and Syllabus Content
     (c) PROVOSTINST 1531.86 Academic Course Credit Guidance
     (d) ACDEANINST 1531.50B Academic Courses with 28X and 48X Designators
     (e) PROVOSTINST 1531.59C Majors, Course Enrollments and Changes

1. **Purpose.** To establish procedures for midshipman research courses.

2. **Cancellation.** USNAINST 1531.79B

3. **Background**

   a. The opportunity to engage in research and scholarship under the mentorship of a faculty member can enrich the educational experience of a midshipman by allowing independent study in an area of special interest and facilitating an original scholarly or creative contribution to the discipline. In a research course, a midshipman often seeks to investigate that which is new or unexplored, or to examine previously reported research results within a new context or via a new approach. Communicating the results of one’s findings is also an important component of research. Research experiences contribute significantly to the Naval Academy's goal of promoting habits of lifelong learning among its graduates.

   b. This Instruction provides guidance and direction to midshipmen interested in enrolling in research courses (XX495 or XX496, and the honors equivalents, XX495H or XX496H) at the Naval Academy. For simplicity, XX495/6 will represent research courses, including the honors versions of these courses.

   c. For Bowman Scholars, a XX495/6 course fulfills the research requirement for that program. A more extensive research opportunity exists for selected midshipmen under the Trident Scholar Program described in reference (a).

4. **Eligibility**
a. Since XX495/6 research courses are expected to be at an advanced level (hence a 400-level course number), they will normally be restricted to 1/C and 2/C midshipmen who have had more than an introductory course in the subject area being studied. With the approval of the Associate Provost of Academic Affairs (APAA), 3/C midshipmen with extraordinary academic preparation may enroll in a research course. 4/C midshipmen may not participate in research or research prep courses.

b. Additional eligibility requirements or limits on enrollment in research courses are determined by individual departments and based on available resources.

c. Research preparatory ("research prep") courses can be taken by upper-class midshipmen, with faculty sponsorship and appropriate approvals, to prepare for future enrollment in XX495/6 courses or Trident research. This Instruction focuses on XX495/6 research courses but research prep courses are described below.

5. **Completion of Matrix Requirements.** Research courses (XX495/6) may be used to satisfy the requirements of an academic major or to meet the requirements of a free elective, if applicable. Departments with majors’ programs may determine how these courses will count to satisfy the requirements of their majors. Midshipmen are responsible for reviewing the prerequisites of research courses and how they are counted in their matrix before pre-registering for these courses.

6. **Course Policy Statements, Designators, Credits, and Scheduling**

a. Research courses may be offered by any department. As with other academic courses, a research course must include an associated course policy statement outlining the expectations and requirements of the course, as described in reference (b). A copy of the course policy statement should be provided to students at the start of the semester and retained by the Department Chair. Departments may provide a collective research course policy for all their research students or individualized policies by research mentor.

b. Research courses are normally 3 credits, designated as XX495 (fall) and XX496 (spring), with XX being the code for the department offering the course (i.e., SC495 is a fall semester chemistry research course). The course designators XX495 and XX496 shall be reserved for research courses, and not used for seminar, reading, or capstone courses. Honors research courses are designated XX495H (fall) and XX496H (spring).

c. Research courses follow the course credit structure of 0-6-3 for the recitation-lab-credits distribution. The 6 hours of “lab” per week constitutes active work on the research project which may include working in a laboratory, on a computer, or in the library, depending on the nature of the research. The out-of-class time should reflect the expectations of the credit assignment, as described in reference (c).

d. Research courses for greater than 3 credits require Department Chair and APAA approvals. These courses cannot be used to reach the 15-credit minimum requirement, but do count towards the maximum credit limit, and would only be considered in special cases. Course designators
include XX497 (4 credits, fall) and XX498 (4 credits, spring). These courses maintain the same project requirements as XX495/6 courses.

e. No midshipman shall be permitted to carry more than one research course or research prep course in the same semester.

f. A research course may be repeated or continued, with faculty sponsorship, departmental approval, and as it permits in a midshipman’s matrix, but a Research Agreement and project deliverables (report and oral summary) are required for each semester.

g. Research prep courses are available for 0, 1, or 2 credits, and can be taken to supplement knowledge prior to enrolling in a XX495/6 course. While not a prerequisite for XX495/6, these prep courses are intended to prepare midshipmen for their research project by familiarizing themselves with the subject area and existing literature, and/or by learning laboratory techniques, instrumentation, or computation tools, under the direction of a faculty mentor. These courses typically do not result in a complete research experience, but if taken for credit, require academic work to reflect the credit awarded. A research prep course taken for credit will appear on a transcript but a 0-credit research prep course will not.

   (1) Research prep courses cannot be taken to reach the 15-credit minimum requirement, but do count towards the maximum credit limit, and should not be repeated. In rare cases, where a project or faculty mentor has changed, a research prep course may be repeated with APAA approval.

   (2) Below are descriptions of the research prep courses and their course designators: A 0-credit research prep course (1-0-0, XX290 for either semester) includes meetings with the faculty mentor and discussions of future research. These courses do not bear credit and are not graded; however an instructor must be assigned to the course.

   (3) A 1-credit research prep course (1-0-1 or 0-2-1, XX391 (fall) or XX392 (spring)) requires meetings with the faculty mentor and a final product, such as a research proposal, literature review, or progress report. This course requires an assigned instructor, at least one scheduled meeting time, and a grade to be assigned.

   (4) A 2-credit research prep course (2-0-2 or 0-4-2, XX393 (fall) or XX394 (spring)) requires meetings with the faculty mentor and a final product, such as a research proposal, literature review, or progress report. This course requires an assigned instructor, at least one scheduled meeting time, and a grade to be assigned. A 2-credit course will require more time and has higher expectations than the 1-credit version.

   (5) Other courses may be useful for preparing students for XX495/6 research projects, such as, special topics courses, “reading” courses, or independent study, under the 48X designation as described in reference (d); these courses are not governed by this Instruction.

   (6) Some departments may offer other specialized research prep courses within their major. These are separate courses, with different course designations, and are not governed by this
Instruction.

h. All research and research prep courses must have a faculty instructor (mentor) assigned to that course or section in MIDS, with at least one scheduled period to facilitate meeting with the midshipman. It may be beneficial to schedule all or most of the research times in MIDS for projects that require more faculty supervision or interaction. The assigned instructor will submit accountability and grades in MIDS. Scheduling of research times will be done by departments in cooperation with the Registrar’s Office, typically after schedules have been released.

i. Trident Scholar research courses follow different policies as outlined in reference (a).

7. Actions Required

a. Midshipmen:

(1) Planning for Research and Pre-Registration. Planning for research must occur the semester before the research course or research prep course is taken. Prior to Pre-Registration, a midshipman must identify a faculty member who has agreed to mentor them for the semester and ensure that all prerequisites for the course are met.

(2) Research Agreement and Registration. After Pre-Registration has closed, midshipmen signed up for a research course will be sent a Research Agreement form by the Associate Director of Midshipman Research (ADMR), which will request the name of the faculty mentor, title of the proposed research project, and other project-related information. The ADMR will send the collated responses to the associated Department Chair to be evaluated, and if approved, the midshipman will be officially enrolled in the research course. If a midshipman does not submit the Research Agreement by the stated deadline or is not approved, the midshipman may be disenrolled from the research course.

(a) Midshipmen who pre-register for a research prep course will be sent a modified Agreement form to request the name of their faculty mentor and number of credits they are seeking. This information will be forwarded to the associated Department Chair for approval.

(b) Note that some research mentors may also require a research proposal to be submitted before research is started, but this will be determined by the faculty mentor and/or by the department. If required, the research proposal will be submitted with the Research Agreement form.

(c) The policies for dropping or adding a research course are the same as for other courses. These can be found in reference (e).

(d) Typically, research courses cannot be added after the semester has started. Midshipmen repeating or continuing research for a second semester must follow the requirements for each semester as these are separate courses.

(3) Project Requirements (“Deliverables”):
(a) **Written Report.** Each midshipman enrolled in a research course must produce a final, written report describing the project goals, methodologies and outcomes. An electronic copy of the final report (in pdf format) is due to the Department Chair (or departmental research coordinator) no later than the last day of classes. This is a strict deadline. Policies on late submission must include, at a minimum, a substantial grade reduction. The format, style and content requirements for the final report will be set by each department in its research course policy statement, and these requirements must be promulgated to the midshipman at the start of the semester. A typical report should include an abstract, introduction or background for the project, statement of the goals of the project, description of the methodology employed in the research effort, analysis of the work accomplished and the results obtained, and a conclusion. This report must be endorsed by the faculty mentor prior to submission to the Department Chair.

(b) **Oral Presentation.** Each student enrolled in a research course must present an oral summary or presentation of his or her research by the end of the semester in which the project was undertaken. Effective communication of one's findings is an important aspect of research. These presentations shall be open to all faculty, staff, and midshipmen, as well as to invited guests from outside of the Naval Academy. It is suggested that the presentation be in the form of a poster presentation or slideshow presentation followed by a question-and-answer period. Requirements concerning the format, style and content of the presentation will be set by each department in its research course policy statement, and these requirements must be promulgated to all interested parties at the start of each semester. When participating in the Yard-wide Poster Session or Capstone Day, midshipmen must adhere to the specified printing and administrative deadlines for those activities. The Registrar’s Office is available to assist in scheduling poster presentations during the first day of the final examination period, if the use of that time is desired. The Chair of the sponsoring department will advise research students and their faculty mentors of the scheduled times for their presentations. While presentations at external meetings or conferences are good educational experiences, to meet this requirement, the final presentation must occur at USNA. 

(c) **Group Projects.** While collaboration is common in research, students in research courses must prepare their own research reports and presentations, even if they are working collaboratively in the lab with other students. Each student must be evaluated individually based on their efforts.

b. Faculty Mentors:

(1) Faculty members are urged to support midshipman research by encouraging qualified students to enroll in such courses, by suggesting appropriate projects, and by serving as project advisers. Mentoring midshipmen in directed study or research supports the academic mission of the Naval Academy.

(2) Faculty mentors are expected to serve as expert academic guides, critics, editors, and role models for their research students. From the initial stage of literature searches and proposal preparation through the completion of the research and delivery of a written report and oral presentation, advisers are expected to actively nurture their research students and foster their
development as independent scholars. It is very strongly recommended that faculty research mentors have regular contact with their research students to ensure that the requisite time is devoted to the project (both inside and outside of the classroom/lab).

(3) Faculty mentors must also ensure that their midshipman researchers comply with all Naval Academy and departmental administrative and safety requirements pertaining to their research projects. Midshipmen who work in laboratories must have proper safety training prior to working in this environment. Research involving human subjects must have Human Research Protection Program (HRPP) approval prior to conducting the research.

(4) Faculty members who agree to mentor a midshipman in a research course will be listed in the Research Agreement form submitted by the midshipman, via the ADMR, for approval by the associated Department Chair. The faculty mentor will also be listed as the “instructor” for the course/section in MIDS and required to submit accountability. For multiple faculty mentors, one must be designated the “instructor of record” or primary mentor. Scheduling of the one period (minimum) meeting time will occur after schedules are released.

(5) Grades for a research course will be determined and submitted via MIDS by the midshipman’s faculty mentor. The semester timeline for grade submission will follow the same schedule that applies to all other courses. Faculty research mentors are encouraged to consider the assessments of other faculty members or collaborators as they assign interim and semester grades in these courses.

(6) Faculty members may use research prep courses to help recruit midshipmen for research or better prepare them for a research project. Having midshipmen conduct a literature review or write a research proposal may make their XX495/6 experience more productive.

c. Departments and Department Chairs:

(1) Departments will formulate their own research course policies for the administration and evaluation of midshipman research courses. These policies may be reflected in a collective research course policy statement for all their research students or individualized policies by research mentor. These course policy statements must be collected and retained by the Department Chair each semester, as described in reference (b).

(2) After Pre-Registration, Department Chairs will receive a list of midshipmen requesting to take research courses. Upon reviewing the responses from the Research Agreement form (via the ADMR), Department Chairs shall approve or disapprove applications for research by midshipmen prior to scheduling. Departmental resources, feasibility of the project, faculty workload, and other considerations may factor into these decisions. Midshipmen not approved for a research course will be disenrolled from that course.

(3) The Department Chair (or the departmental scheduling officer) will work with the Registrar’s Office, if necessary, to develop schedules and sections for research or research prep courses. Each student will have an assigned research mentor and at least one hour scheduled weekly to meet. Other times may be scheduled as needed.
(4) To aid in management of midshipman research courses, each department should designate
a midshipman research coordinator to communicate with the ADMR on issues involving midshipman research courses (research requirements, poster session dates, funding
inquiries, collection of reports, etc.).

(5) The Department Chair (or departmental research coordinator) shall forward the
end-of-semester research report (pdf) files to the Associate Director of Midshipman Research
(ADM) by the end of final exams.

d. Naval Academy Research Office:

(1) The Naval Academy Research Office will maintain a public web page of “Midshipman
Research” information, including highlights of student research and dates of Yard-wide poster
sessions as well as an archive for student research reports.

(2) Departmental funds or individual faculty member grants may be available to support
student research projects or travel to conferences to present research results. However, if these
funds are not available, the Research Office manages funds which may support student projects
or travel. Requests for funding must be submitted early in the semester through the ADMR or as
needs arise. Note that all funds are subject to availability and a project’s success should not be
solely dependent on external funding. All research reports and presentations should
acknowledge the funding sources used to support the projects.

8. Involvement of External Research Scientists and Sponsors

a. Only Naval Academy faculty may serve as a midshipman’s research mentor. However, the
involvement of other scholars as project consultants or external collaborators is encouraged and
welcomed.

b. Work for research courses shall be conducted at USNA. If research requires any work to
be done off-site for successful completion, approval via the USNA chain of command must be in
place before the project will be approved. Occasional visits to off-site facilities (i.e., NRL,
NASA Goddard, National Archives) can be arranged with proper Chain of Command approval.

9. Records Management

a. Records created as a result of this instruction, regardless of format or media, must be
maintained and dispositioned for the standard subject identification codes (SSIC) 1000 through
13000 series per the records disposition schedules located on the Department of the
Navy/Assistant for Administration (DON/AA), Directives and Records Management Division
(DRMD) portal page at
t/Approved%20Record%20Schedules/Forms/AllItems.aspx.
b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact the U.S. Naval Academy Records Manager or the DON/AA DRMD program office. 6. Review and Effective Date. Per OPNAVINST 5215.17A, the Associate Provost for Academic Affairs will review this instruction annually on the anniversary of its effective date to ensure applicability, currency, and consistency with Federal, DoD, SECNAV, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction.

\[Signature\]

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