



UCC Program Review Committee summary of review

Program – Aerospace Studies (aka Air Force ROTC)

This program has no degrees but upon completion of the Military Science curriculum graduates earn a Presidential commission as a 2nd Lieutenant in the United States Air Force (USAF).

Recommendation

This program is found to be **viable**, see report for commendations, concerns, and recommendations.

Date of last review – AY 2006

Date of this review – AY 2018

This review has been sent to program chair, she had no issues with the report.

This review has been sent to program college dean, her comments are attached.

University Curriculum Committee Academic Program Review¹

Department of Aerospace Studies

EXECUTIVE SUMMARY

The Ohio University Department of Aerospace Studies is a **viable** program. The primary goal of the Department is to recruit students, referred to as cadets, into the Air Force Reserve Officer Training Corps (AFROTC) and to train them for accession as Second Lieutenants in the Air Force. The AFROTC program provides cadets a challenging program to develop leadership skills through hands-on experience and a core curriculum. Since the last review there have been some notable changes including the creation of a minor in Aerospace Studies. The program undergoes various external inspections to insure compliance to AFROTC objectives. The program has successfully passed these inspections, often with excellent marks, which effectively serve as an external “accreditation” of the program.

Commendations

The Department of Aerospace Studies is strong in the following areas:

- Student satisfaction and engagement
- Recovery in recruiting numbers
- Strong history of community service and engagement
- Highly effective and well-developed curriculum
- Efficient use of resources
- Recruitment of minority students

Concerns

The mission of Department of Aerospace Studies will be more effective if the following areas are addressed:

- Potential for loss of institutional memory
- Need for formal administrative training, for new cadre due to turnover
- Vulnerability of the core instructional mission to budget reductions
- Need for flight simulator to increase training and competitiveness of the cadets
- Visibility of the program on the university website

¹ Prepared in Spring 2018 by three internal reviewers recruited by the UCC Program Review Committee — Dr. Ahmed Faik (Department of Environmental and Plant Biology), Dr. Kimberly Rios (Department of Psychology), Dr. Eric Stinaff (Department of Physics & Astronomy).

Recommendations

- Institutional memory and/or advocacy: While both the current cadre and the University College are doing an excellent job of maintaining continuity and advocating on behalf of the AFROTC program, the loss of key personnel (due to mandatory turnover of cadre every 3 years) could jeopardize this. This could be addressed by the designation of a formal advocate or liaison person/office on the University's side to ensure continuity and retention of long-term institutional history.
- It would be beneficial to have formal training for new faculty to help them get acquainted with Ohio University specific procedures and protocols (e.g., budgeting, HR) as well as academic, outreach, counseling resources, and internal funding sources.
- The department is currently running with minimal resources, any further cuts would jeopardize its core instructional mission.
- Both cadre and cadets expressed an urgent need for a flight simulator to increase students training and competitiveness. Currently, cadets are required to travel to Columbus to take tests in the flight simulator at Ohio State University. The committee recommends that the Department of Aerospace Studies apply for an 1804 award (perhaps in conjunction with other departments such as Avionics and OU Airport) to help fund the purchase of a flight simulator at OU.
- A concern that was expressed by cadre was about the visibility of the program on the University's website and exclusion from email list on information system. Currently, it is not easy to find the program by browsing the University website. Also, the cadre did not seem to receive emergency emails (e.g., about campus closures) and notifications of events held on campus. These IT issues need fixing from the University's side.

INTRODUCTION

David Ingram, chair of the university's Program Review committee, constituted the program review and invited it to conduct an evaluation of the Department of Aerospace Studies as part of the regular program review process in place at Ohio University. The program review committee was asked to examine various aspects of the Department including the health of the program as a whole and the educational programs, and to offer recommendations, identify issues of importance and include commendations about points of excellence.

The schedule designed according to university guidelines for program reviews, the committee visited the department from the morning through early afternoon on Monday, January 29, 2018. The Committee had ample time to visit with the stakeholders in the Department including faculty and staff (referred to as cadre), graduate and undergraduate students in the program (referred to as cadets), and individual meetings with Detachment Commander Lt Col Layla Sweet and Dean Carey Busch.

Prior to the visit, the Committee was provided with a comprehensive self-study report prepared by the Department along with data regarding enrollments and recruiting numbers. The Committee's report includes our perceptions of the Department's strengths along with any areas of concern that arose from our discussions, and recommendations to help guide the Department as it moves forward.

PROGRAM OVERVIEW

The primary mission of the Department of Aerospace Studies (DAS) is to recruit students as cadets into the AFROTC and to train them for accession as Second Lieutenants in the Air Force. Despite this specific and unique goal within the University, the Department is analogous in many ways to a typical department at Ohio University (OU). Though the Department does not offer a formal major or a degree, the cadets are similar to majors within other departments. The departmental faculty and staff, or cadre, have Group IV faculty classification and are active duty officers and volunteers who are selectively chosen by Holm Center (the AFROTC headquarters) and approved by the University President. Currently, the department is staffed with six faculty and enrolls 43 cadets.

The curriculum is designed by the Department of Defense and the Holm Center to meet the goals of the AFROTC program. The courses cover topics including communication skills, military history, professionalism, and customs, as well as have a strong focus on leadership and management fundamentals. Not surprisingly, many of these topics may have a broad appeal to students outside the AFROTC program as well and as a recognition of this, the Department has recently been successful in formalizing a minor in Aerospace Studies. The minor is advertised on the Department of Aerospace Studies website and in recruiting emails to students, academic advisors, and Learning Community instructors. The cadre also plan to advertise it at the 2018 Bobcat Student Orientation. The minor and advertisements are targeted to all incoming cadets as well as all incoming OU students; an OU student does not need to be a cadet to pursue the minor. Currently, two non-cadet students are involved in the minor, and the cadre have expressed a desire to double that number every year. The requirements for the minor include 16 credit hours (2 each from the AST 100-level and 200-level course sequences, and 6 each from the AST 300-level and 400-level course sequences), with prerequisites for each course stated in the undergraduate catalog.

Given the wide applicability of AST courses to students both in and out of the AFROTC program and the recent approval of the Aerospace Studies minor, the AFROTC program can be seen, in part, as a potential recruitment tool for prospective students and an efficient strategy to retain enrolled students (because of job security for students after graduation).

FACULTY

As previously described, the cadre have Group IV faculty classification and are active duty officers and volunteers who are selectively chosen by Holm Center and approved by the University President. A unique aspect of the faculty profile is that officers serve three-year tours and NCOs serve four-year tours, unlike a typical department where the faculty are often lifetime members. Despite what would be considered extensive turnover rate for a typical department, there was no apparent detrimental effect on the continuity of instruction. It was clear that there was excellent record keeping and sufficient overlap to quickly train new cadre to be effective instructors. The cadets had no issues with the rotating nature of the cadre. The emphasis on cadet leadership also seems to help smooth over issues with rotation.

A more pressing concern with the rotating nature of the cadre is with institutional memory and institutional training with regard to the University side. By essentially bringing in a new department chair every three years, this person must often start from scratch in learning the details of university procedures and protocols for things such as budgeting and HR, as well as becoming familiar with essential campus academic, outreach, counseling resources, and funding resources. Though the University College has done well in working with new cadre in this regard, it seems that this has often been done informally. It would be beneficial to have specifically designed formal training for ROTC faculty to help them get acquainted with OU.

It should also be noted that the rotational nature of the Department also places extra importance on the staff personnel such as the office manager, Ruth Blicke, who serves as an essential resource for maintaining much of the OU specific knowledge.

The faculty are very strong instructors. During Spring 2017, two instructors were each rated “Excellent” by external evaluators in 13 out of 13 categories (e.g., instructional techniques, lesson preparation, question/answer techniques). Particular areas of strength noted by the evaluators included the faculty’s ability to convey the practical implications of the course material, as well as the use of multiple teaching methods (e.g., different forms of media, discussion questions). Two of the faculty received recognition/awards in 2017: Lt Col Layla Sweet received the Breaking Barriers Award (given by Ohio University to a woman who has demonstrated success working in a male-dominated field; indeed, Lt Col Sweet is the first Ohio University female commander in either the Air Force or Army ROTC unit), and Capt Jacob Reighter received the Instructor of the Year Award for ROTC (making Capt Reighter the top-ranked instructor out of approximately 450 instructors eligible for the award).

THE UNDERGRADUATE PROGRAM

The cadets enrolled in the DAS and the AFROTC program all have primary majors elsewhere in the University. They are required to take a 16-credit Aerospace Studies course sequence (AST 101-102 in freshman year, AST 201-202 in sophomore year, AST 301-302 in junior year, AST 401-402 in senior year). Each of these courses is 2 credit hours and is accompanied by a 1-credit hour “Leadership Laboratory” for a total of 24 credits over four years. Freshmen and sophomores have Air Force ROTC classes for 3 hours per week, whereas juniors and seniors have Air Force ROTC classes for 5 hours per week. The detachment now has eight female cadets, almost doubling the female enrollment rate as of March 2017, and the first-ever graduate student (also female) enrolled in the program. Although the cadets expressed high levels of satisfaction with the AST courses, they also expressed concerns about the overlap between AST course requirements and university core requirements (e.g., Tier II). For instance, they noted that AST 201 and 202 (taken during sophomore year) contain very similar content to many American History courses. As such, they wondered whether it would be possible for some AST courses to count toward Tier II requirements, and hence for some Tier II requirements to be waived. The department should investigate whether certain courses it offers may fulfill College or University requirements such as Tier II.

The cadets participate in (and in the case of upperclassmen, help lead) physical training from approximately 5:00 until 9:00 every morning. Thus, the AFROTC program is structured similarly to many athletic programs, with set times during which they are engaged in physical activity and cannot schedule courses. Given this, clear communication between students and their academic advisors about course scheduling and timing requirements, as well as about the priority registration granted to cadets, is imperative.

CONCLUSION

Overall, the Department of Aerospace Studies serves its cadets and Ohio University very well, and it is the review committee's recommendation that the program be rated as **viable**.

COMMENDATIONS

See above

CONCERNS

See above

RECOMMENDATIONS

See above



OHIO
UNIVERSITY

University College

Chubb Hall 140
Athens, OH 45701-2979

T: 740.593.1935
F: 740.593.0206
university.college@ohio.edu
www.ohio.edu/univcollege

March 15, 2018

Dear Dr. Ingram,

Thank you for the careful examination of Department of Aerospace Studies and thoughtful report provided by the committee. This process provides a valuable perspective to ensure the continuation of a high quality academic program and I appreciate the opportunity to respond to the recommendations. The following provides some clarification as well as future actions regarding this valuable program.

Aerospace Studies is somewhat unique in their budgetary structure as the funding for the faculty positions comes directly through the Air Force or federal government and is not at the discretion of the institution. University College does provide financial support to the department for administrative operations including space, office equipment, a classified staff member, and budgetary support through our CFAO. University College provides additional programmatic funds to be used at the discretion of the program for recruitment and retention purposes. The determination of this funding is outlined in a memorandum of understanding which is reviewed and renewed at regular intervals. Budgetary decisions in University College have not been to approach budget reductions through strict percentage cuts across programs, rather we have examined the potential programmatic impacts to any proposed reduction so that decisions may be made that allow for the core mission of all programs, including Aerospace Studies, to be met.

I agree that a more formalized approach to orienting new faculty could prove beneficial to maintaining the current levels of continuity during cadre transition. Currently the classified staff person is a source of expertise related to everyday office functions, the CFAO provides an orientation and serves as an ongoing resource regarding budget and HR procedures, and the Dean provides continuity regarding academic and student resources. While all three are sources of knowledge, the Detachment Commander and I have discussed the need to outline the necessary resources and information to support a successful transition and will do so before the fall 2018 semester. This resource will be useful to the three advocates in assuring essential information is conveyed to new faculty.

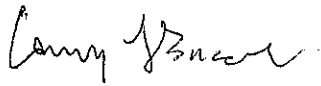
During the site visit the suggestion was made of pursuing the 1804 grant to assist with funding the flight simulator. Shortly thereafter, I provided the Detachment Commander with the information regarding the 1804 grant, the process, the timeline, and articulated my support of such a proposal. Due to other program priorities, the faculty did not prepare a proposal this year, but now have access to the critical information to prepare and submit a competitive proposal during the next grant cycle.

Regarding the final recommendation, we share the committee's concern that the faculty do not appear to receive standard email communications to all employees, particularly emergency notifications. We are unsure why these faculty are excluded and are working with our director of communications to remedy this oversight. When reviewing the ability to locate the program

through browsing the University's website, this access seems on par with other programs. The Aerospace Study's website, consistent with others in University College, is housed within the college's website and appears in both the "Academic Directory" and "Schools and Departments" section of the "Academics" section of the main University website.

I appreciate the time and thorough feedback provided by you, your committee, and the reviewers. This affords us the opportunity to ensure that Aerospace Studies continues to be a viable program that provides a high quality academic opportunity for a variety of students regardless of their participation in AFROTC.

Sincerely,

A handwritten signature in black ink, appearing to read "Carey Busch". The signature is written in a cursive style with a prominent initial "C".

Carey Busch
Acting Dean, University College