

## **Board 17: Military and Veterans Division: The Evolution of College Credit Recommendations for the United States Army by the American Council on Education**

**Mr. George D Ford P.E., Western Carolina University**

Dr. George Ford P.E. is the Director of Mississippi State's Building Construction Science (BCS) program. Dr. Ford has 15 years of industrial experience including corporate work, and 16 years of teaching experience at the post-secondary level.



## **The Evolution of College Credit Recommendations for the United States Army by the American Council on Education**

**Janet C. Ford, Western Carolina University**

Janet Ford, Juris Doctor, is an Assistant Professor in the College of Business at Western Carolina University and teaches in the area of business law.

**Dr. George D. Ford, Western Carolina University**

Dr. George Ford P.E. is an associate professor in the Construction Management Department at Western Carolina University.

# **The evolution of college credit recommendations for the United States Army by the American Council on Education**

## **Abstract**

The American Council on Education (ACE) is based in Washington, DC. A contractor for the Department of Defense, ACE oversees academic evaluation of military courses. ACE recruits university faculty members from across the country to evaluate military training and make academic credit recommendations. These evaluators are tasked with matching the content of military courses to the content of civilian university courses taught within their own disciplines.

Military training needs and curricula have changed over the past three decades as a result of shifting budgets, technological advancements, and evolving military priorities [1][2]. Higher education has also changed in response to population trends, economic shifts, and increased accessibility [3][4][5]. Military students and veterans currently comprise 4% of American college students [6]. ACE credit recommendations have changed to reflect these shifts in military training and academic content. This paper discusses the extent to which changes in military training, specifically that provided by the United States Army, have affected ACE's credit recommendations at the undergraduate level.

## **Introduction**

The American Council on Education (ACE) is based in Washington, DC. A contractor for the Department of Defense, ACE oversees academic evaluation of military courses. According to their website:

“ACE has provided a critical link between the U. S. Department of Defense and higher education and in this role helps our nation's military members and veterans gain access to higher education. ACE reviews military training (courses) and experiences (occupations) with the goal of awarding equivalent college credits for those experiences. The Military Guide has over 25,000 exhibits (22,000 courses and 3,400 occupations) dating back to 1954.”

Data was obtained from the ACE Military Guide [7] for Army courses that were evaluated between 1985 and 2017. The resulting list of over 5000 courses was filtered for courses

evaluated by a review team recently (2016-2017) and also evaluated at least two times since 1985, resulting in a smaller dataset for concise comparative evaluation.

The raw course list included job specialty courses for: commissioned officers; warrant officers; and enlisted ranks; leadership courses; and Active Duty, Reserve and National Guard courses. To further simplify analysis, Active Duty courses were specifically chosen because their content generally appeared to the authors to be more uniformly developed and delivered in terms of duration and content. Several paper and mail correspondence courses in the early 1990s, before computerization and email, were also excluded from the final dataset. Further, commissioned officer courses were eliminated since most officers already have undergraduate degrees, and some officer training courses are more likely to receive graduate level recommendations, which are beyond the scope of this study. A separate study should be conducted in the future which specifically addresses commissioned officer courses. The final dataset included over 100 courses providing a final number of 30 comparative observations. This paper examines and discusses course trends in Army training since 1985 and how the ACE military credit recommendation program has evolved in response to these trends.

## **Discussion**

The Military Guide on the ACE website [7] lists credit recommendations for military courses and occupations for all branches of the US services. Course listings are organized by the branch of service and include all training courses evaluated by ACE. Occupational recommendations are organized by military job specialties based upon enlisted rank. There are thousands of courses in the database [8]. For the purpose of this discussion and to simplify analysis, only the US Army database was considered.

The assessment process is best described on the ACE website assessor instructions [9]:

“For each course, the faculty evaluators examine instructor materials, student materials, and assessments, including the course outline, syllabus, instructor’s manual(s), presentation slides, student texts, handouts, and assessment instruments.....

Your job as a faculty evaluator is to determine if the course materials have enough content, scope, and rigor to align with courses currently being taught at accredited institutions.....

ACE teams use Bloom's Taxonomy to help them analyze their alignment of credit recommendations and validate the learning outcomes.....

The decision to recommend credit will be based on the team's consensus. No formula exists for making the judgment on credit equivalency which helps potential veteran college students develop a greater sense of interpersonal and intellectual competence [10]. If the consensus is not to recommend credit, the team is still required to identify the learning outcomes, methods, and topics of instruction, in addition to providing a short justification for why the team is not recommending credit.

In determining the credit recommendations in semester hours, please consider:

- There is no simple arithmetic conversion of the number of instructional hours to the number of credits recommended.
- Learning outcomes and the amount and complexity of covered content material are the key factors when deciding the number of credits to recommend.
- Credit recommendations do not need to be equal to a full college course in any one subject area, but may fulfill partial course requirements. A recommendation of one or two semester hours is acceptable.

There are four credit categories:

- Vocational certificate: normally found in non-degree programs; not generally transferable; occupational in nature; practical application.
- Lower-division baccalaureate/associate degree: typically found in the first two years in college degree programs; focus is on basic principles and analytic skills.
- Upper-division baccalaureate degree: found in the last two years of a BA/BS program; focuses on critical thinking; more advanced level in scope and depth.
- Graduate degree: must have independent research, critical analysis, and scholarly application; overall course pass rate must be 80%." [7]

As this process describes, credit is based upon the scope and rigor of the course considering Bloom's Taxonomy created in 1956 and revised in 2001 [11].

For example, the learning objectives of "remembering" or "understanding" generally imply vocational or lower division credit associated with course breadth, whereas "create" or "evaluate" may be more appropriate to upper division courses implying depth in course

content. The figure below provides an example of a course review and shows the course topics, content description and credit recommendations.

# Bloom's Taxonomy

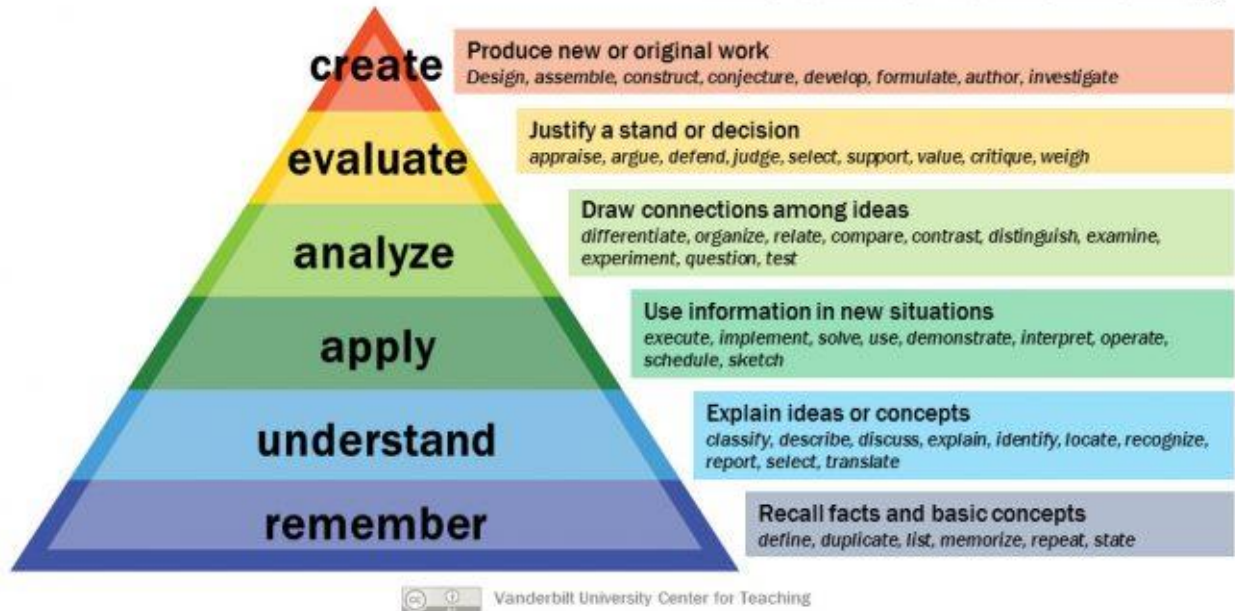


Figure 1: Bloom's Taxonomy, Vanderbilt University Center for Teaching

Source:

[https://www.google.com/search?q=blooms+taxonomy&rlz=1C1FERN\\_enUS686US686&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjg7oKc\\_fXYAhVL0FMKHd8IC8MQsAQIPw&biw=1600&bih=769#imgrc=LY1ImA3IdOodNM](https://www.google.com/search?q=blooms+taxonomy&rlz=1C1FERN_enUS686US686&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjg7oKc_fXYAhVL0FMKHd8IC8MQsAQIPw&biw=1600&bih=769#imgrc=LY1ImA3IdOodNM):

## Course Exhibit

### AR-0419-0061 v4

**Title:** TRANSPORTATION MANAGEMENT COORDINATOR

**Course Number:** 553-88N10.

**Location:** Transportation School, Fort Lee, VA.

**Length:** 6 weeks (295 hours).

**Exhibit Dates:** 7/11–Present.

**Learning Outcomes:** Upon completion of the course, the student will be able to recognize intermodal transportation methods, including water, rail, air and highway carriers; classify and identify hazardous material and the transportation thereof; recognize the process of cargo inspection, processing and stowing; identify the concept of personnel, supplies and equipment movement; and recognize the principles of inventory control, cargo, packaging (palleting) and shipment clearance, all while utilizing customer service techniques.

**Instruction:** Methods of instruction include audiovisual materials, classroom exercises, computer-based training, discussion, lecture, and practical exercises. General course topics include intermodal freight transportation; routing and scheduling; transportation of hazardous

materials; inventory control; customer service; cargo inspection, processing and stowing; and shipment clearance.

**Related Competencies:** *Introduction to logistics and supply chain management* topics include aircraft loading; basic storage; cargo documentation; communication; hazardous material transportation; intermodal transportation; material handling; movement and distribution; movement of personnel, equipment, and supplies (planning, organizing, and executing); packaging; permit procurement; and vehicle tracking. *Transportation operations* topics include air, sea and land transportation operations; deployment operations; freight routing; material movement; passenger and personal property movement; transit tracking; and transportation safety.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in introduction to logistics and supply chain management and 3 in transportation operations.

**Related Occupations:** 88N.

THIS PAGE WAS LAST UPDATED ON 03/19/2013

Figure 2: ACE Military Guide Course Summary

Source: <http://www2.acenet.edu/militaryguide/ShowAceCourses.cfm?ACEID=1345293>

This course was reviewed in 2013 and received a credit recommendation of 3 semester hours in introduction to logistics and supply chain management and 3 hours in transportation operations. The course duration was 295 contact hours. Typically, university courses are 45 hours in duration for a 3-semester hour course. The faculty evaluators determined that the content of this course contained materials of similar depth and breadth as might be found in a four-year college or university course at the lower division conforming to Bloom's Taxonomy (recognize).

The duration of the military training courses and ACE's academic credit recommendations for those courses were compared to determine if, when Army course durations changed, there was a corresponding change in the content of ACE recommendations for those courses. Generally, Army courses were found to have shortened durations measured in contact hours during the period observed.

## **Findings**

Upon first examination of the data, there were two noticeable shifts in ACE credit recommendations. First, ACE credit recommendations shifted away from vocational credit recommendations to lower division credit recommendations in postsecondary course subjects. The three credit-hour increments in traditional subjects aligns with the listings of typical

American university catalogs. Second, the total number of credit hours recommended for a given course contact hour increased over the period observed.

Sixty courses, thirty pairs in the final database, were examined to determine trends or common themes. Nineteen of the course pairs decreased in contact time duration during the period observed. One pair remained the same, and ten pairs increased in course contact times. The range of contact time in the earlier courses was between seventy-four and 980 hours per course, with a mean of 335 hours. The range of contact time in the later courses was between forty-five and 715 hours per course with a mean of 337 hours. While more courses decreased in contact time, the number of hours in ten courses increased in contact times resulting in a slightly higher overall average mean for the dataset.

The credit recommendations typically followed the changes in course contact times. The thirty earlier courses received a total of 209 semester hours of credit recommendations or about 7 hours per course. The later courses received 244 semester hours of credit recommendations or about 8 hours per course, as one would expect with higher average contact times overall in the dataset. The range of recommended credit hours was between zero and twenty-nine semester hours.

It is worthy to note that the average number of contact hours per recommended credit hours decreased from 48 to 41.5. In other words, Army courses became more credit worthy per contact hour over the period observed according to ACE evaluator reviews. Review of individual courses in the database confirmed this trend in eight of the ten courses with increased contact time which corresponds to the post-secondary educational literature suggesting fewer topics in more depth [12]. The sum of contact hours of the thirty pairs of courses increased from 10,045 hours total to 10,118 hours even though nineteen courses actually decreased in contact time as stated previously.

There were other minor changes in the courses over the observation period. Some course names were changed to reflect changes in Army philosophy. For instance, earlier courses with "noncommissioned officer" in the course title typically were changed to "advanced



leader". Vocational credit was awarded in five of the earlier courses, but in only one of the later courses where lower division credit was routinely recommended, potentially due to the nation-wide demise of vocational programs at community colleges and closer collaboration of universities with community colleges recognized by ACE evaluators.

In summary, analysis of the courses in the database validated the ACE process. Changes in individual Army courses appear to be recognized and addressed in the ACE review process as seen in the data described previously. The Army course inventory is dynamic as is the ACE review process. Alignment of operational and academic competencies will continue to be a central goal for military organizations and educational institutions alike [13].

## **Conclusions**

This review uncovered the myriad of subjects and areas covered by just United States Army courses, and the complexities involved with articulating military training. The University of North Carolina System [8] and other university systems in the United States are struggling with articulating military training into their educational degree programs. Veterans are often more successful in college than the typical freshman [2]. They often possess the financial assets to support attendance in college; are more mature, having experienced at least one tour of service for three or four years; have experienced classroom lectures, coursework, and field exercises; have practiced styles of living and working that demands discipline; and may have acquired both rank and managerial experiences [14]. For all these reasons, military students are sought after by college and university program administrators. The costs to the university and government entities to educate transfer, military students can be much less than the typical freshman [15]. A college education will provide a veteran a net occupational status advantage over a high school diploma [16]. The validity and utility of credit recommendations by third parties such as ACE will play a key role in the articulation process.

## References`

- [1] D. Salvemini. Details of the military reduction. Retrieved from [www.foxbusiness.com/economy-policy/2015/10/28/details-military-force-reduction/](http://www.foxbusiness.com/economy-policy/2015/10/28/details-military-force-reduction/) [Downloaded March 9, 2018]
- [2] Todaysmilitary.com. Working overview. Available at <http://todaysmilitary.com/working> . [Downloaded March 9, 2018]
- [3] J. Gaff and J. Ratliff. Handbook of the undergraduate curriculum: A comprehensive guide to the purposes, structures, practices and change. *Josset-Bass higher and adult education series. A publication of the Association of Colleges and Universities*. John Wiley, San Francisco. 1997
- [4] C. Goldin. America's graduation from high school: The evolution and spread of secondary schooling in the Twentieth Century. *The Journal of Economic History*. 58,2 pgs. 345-374. 1998
- [5] J. Pryor, Hurtado, S., Saenz, V., Santos and W. Korn. The American freshman; Forty year trends. *Higher Education Research Institute*, University of California, Los Angeles, CA. 2007
- [6] National Conference of State Legislatures. State and Community Roles in Supporting College Completion for Veterans. Available at <http://www.ncsl.org/research/education/veterans-and-college.aspx> [Downloaded March 9, 2018]
- [7] American Council on Education. *Military Guide*, Available at <http://www.acenet.edu/newsroom/Pages/Military-Guide-Online.aspx>. [Downloaded March 9, 2018]
- [8] J. Ford and G. Ford. Articulation of military earned college credit into the University of North Carolina University System. *Proceedings of the American Society of Engineering Education, Columbus, OH*. 2017
- [9] American Council on Education website. <http://www.acenet.edu/newsroom/Pages/Military-Guide-Online.aspx> [Downloaded March 9, 2018]
- [10] K. McKelfresh. A review of What Matters in College: Four critical years revisited. *Colorado State University Journal of Student Affairs*. Fort Collins, CO. 1993
- [11] L. Wilson. Bloom's Taxonomy revised; Understanding the new version of Bloom's Taxonomy. Available at <https://thesecondprinciple.com/teaching-essentials/beyond-bloom-cognitive-taxonomy-revised/> [Downloaded March 9, 2018]
- [12] F. Garafalo and V. LoPresti. Evolution of an integrated college freshman curriculum. *Journal of Chemical Education*. 70,5. Pgs 352-359. 1993

[13] B. Ronald. The limits of competence. Knowledge, higher education and society. *Open University Press*. Bristol, PA 1994

[14] E. O'Herrin. Enhancing Veteran Success in Higher Education, "*Peer Review*" (Association of American Colleges and Universities) Vol. 13, No. 1(Winter 2011).

[15] G. Ford and J. Ford. Translating United States military occupational specialties training into college credit at a regional, comprehensive university. *Proceedings of the American Society of Engineering Education, New Orleans, LA*. 2015

[16] E. Pascarella and P. Terenzini. How college affects students: A third decade of research. John Wiley & Sons. San Francisco, CA. 2005