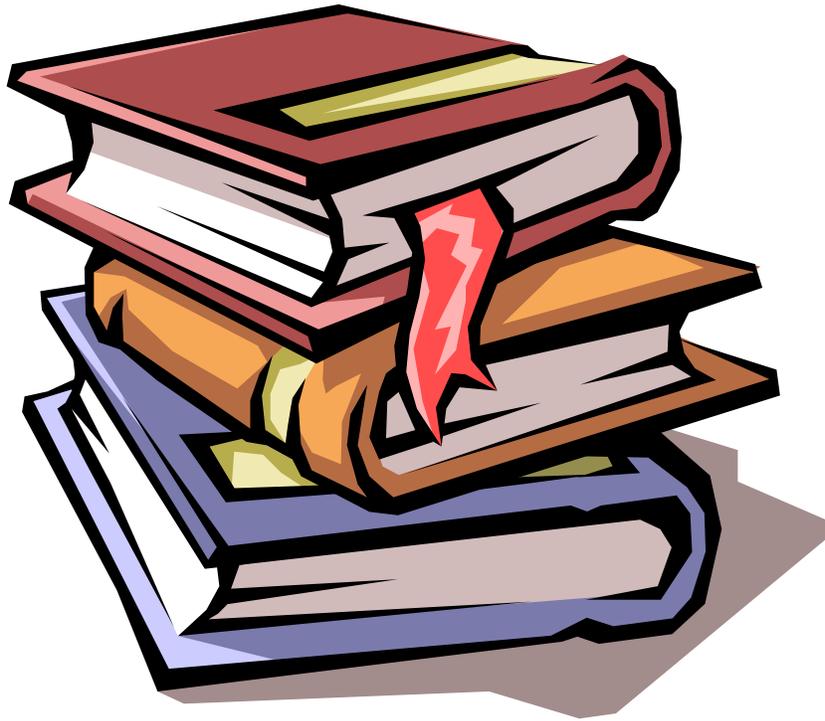


Curriculum Handbook Supplement



Fall 2008

OFFICE OF THE REGISTRAR
CURRICULUM HANDBOOK SUPPLEMENT

Fall 08

This is the fall supplement to the 2008-2009 Curriculum Handbook, specifically focused on registration information for the Spring 2009 semester. The 2008-2009 Curriculum Handbook is located on DFRs intraweb site (<http://orion/Registrar/>) or can be linked to from the Cadet Portal website. This supplement is a useful tool for passing on the most current course information, policy changes, and items of interest; it also addresses issues for the summer of 2009.

The Curriculum Handbook Supplement is edited by the Student Academic Affairs and Academy Registrar's Curriculum Division (DFRC). We appreciate each academic department's timely inputs.

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SECTION I

FROM THE DESK OF THE REGISTRAR

A. REGISTRATION – Spring 09 registration changes in Q2i will be closed after 17 Oct 08. Q2i will continue to accept registration changes for all other future semesters (fall 09 and beyond). Any changes after 17 Oct for the spring 09 semester will be completed IAW paragraph 2-5 of the Curriculum Handbook. Specifically, DFR will require the Dept Head signature for each course added or dropped from the spring 09 semester after 17 Oct.

COORDINATION REQUIREMENTS		
ACTION	Coordination Required	√
Declaring a major	cadet, AAOCA, AIC	
Changing a major	cadet, old advisor, old AIC, new AIC, new advisor	
Changing a track (within major)	cadet, advisor, AIC	
Changes affecting Soaring	306 OSS/OSTS (333-9320)	
Changes affecting Parachuting	306 OSS/OSTP (333-9321)	
Courses req. dept permission	Appropriate departments	

COURSE LOAD REQUIREMENTS			
Class	Minimum	Maximum	√
4°	- 5 academic courses	- normal course load for the spring is 6 courses - cannot take more than six courses - may download to five courses	
3°- 1°	- 5 academic courses	- 22 sem hrs - To exceed 22 sem hrs requires at least a cum GPA <u>or</u> sem GPA of 3.25	

OTHER PAPERWORK

Action	Please...	√
Academic Waiver (Form 69)	- Signature of Dept Head or Division Chair for major affected - Attach APS/Grad check	
Get-Well Plan (Form 68)	- Vital, living document for planning and tracking a cadet's academic improvement (advisor, AOC)	
Independent Study (Form 0-498)	- Goes to DFRR, NLT Lesson 5	
Audit Letter Format	- Get from and return to DFRR	

REGISTRATION DEADLINE FOR SPRING 2009: 17 Oct 08. There are currently two sets of core courses at USAFA. In order to transition to the new core, some core courses are 'locked' in Q2 (can't be moved). The applicable department must approve any exceptions.

The academic core for the Classes of 2009 and 2010 fall under the previous rules – core courses can be moved +/- a year from their designated year. For instance, Philos 310 can be scheduled during the third-, second-, or first-class year. The core for the Class of 2011 and 2012, however, is currently locked to its designated year. Flexibility in a cadet's academic program must come from the major's courses. The exception to this is in regards to 300-level core courses; 300-level core courses can be moved one semester early (thirdclass spring) or one semester late (firstie fall) as long as intentionality per core course sequencing is maintained (Table 7-1 in the 2008-2009 Curriculum Handbook). Advisors need the most recent version of Q2i to enable this 300-level core flexibility/movement (caveat: Beh Sci 310 must stay in the secondclass year). Waivers to these rules for specific cadet exceptions must be approved by the applicable Department Head and the Associate Dean for Student Academic Affairs & Academy Registrar.

DFR WEB SITE – Please visit our web site (<http://orion/Registrar/>) located on the intraweb. At this site you will find current information related to AAOCA/AIC lists, curriculum publications, important dates, the service academy exchange program, Q2i, Student Academic Services offerings, scheduling and records services, and links to frequently used forms and USAFA instructions. DFR is dedicated to updating and revising our web site information on a constant basis – if you ever find a problem or inconsistency, please let us know.

AIRMANSHIP PROGRAMS

GENERAL INFORMATION – Jump (Armnsnp 490) and Soaring (Armnsnp 251) are 10-lesson courses normally overscheduled with Phy Ed courses. Jump is two contact hours (two academic periods – scheduled M1/2, M3/4, T1/2, and T3/4). Soaring is three contact hours (three academic periods - scheduled M1/3, M2/4, T1/3, and T2/4). Both courses are only offered in the morning. The Powered Flight Program (Armnsnp 420 or 420X) is a 20-lesson course (lessons 1-20 (420) or 21-40 (420X)). Because intercollegiate (IC) athletes' Phy Ed courses are in the afternoons, it is difficult to schedule ICs for airmanship courses during the

academic year. Our general scheduling philosophy for jump and soaring is to always maximize cadet participation and never lose a seat/airmanship opportunity—we don't get that seat back later on.

SOARING PROGRAM (Armnsbp 251) – DFR works to maximize soaring enrollment for third-class cadets. Following the release of summer schedules next semester, DFR will register Class of 2012 cadets for soaring during their 3^o academic year. Soaring (Armnsbp 251), however, is now available for advisors to add to cadets' spring schedules (Armnsbp 251F, 251G, or 251H). Thirdclass cadets continue to have priority for the limited number of soaring seats available, but if seats are available in the spring, we will schedule second- and firstclass cadets. Normally, soaring is offered during the following times during the school year:
Block Offered / Seats: fall - A / 45, B / 40, C / 35; spring - F / 41, G / 46, H / 51

JUMP PROGRAM (Armnsbp 490) – Jump is offered during A and C blocks in the fall, E and F blocks in the spring. During the scheduling process for the next semester, DFR prioritizes jump enrollment by class year (1^os have priority) and OPA (highest order of merit has priority). If more cadets are enrolled than available seats, we move the remainder out to a future offering. If fewer cadets are enrolled than available seats, we move cadets up from future semesters. Register interested cadets, via Q2i, into either fall (Armnsbp 490A or 490C) or spring (Armnsbp 490E or 490F). Block Offered / Seats: fall - A / 48, C / 72; spring - E / 72, F / 72

UPGRADE TO SOARING IP or WINGS OF BLUE – Class of 2012 cadets should understand that, if interested in upgrading in either the soaring or jump programs, they should request that airmanship program in summer 09 (e.g., cadets interested in becoming a soaring IP should make their #1 priority request soaring (Armnsbp 251) in the summer; cadets interested in becoming a WoB jumpmaster should make their #1 priority request jump (Armnsbp 490) in the summer). The majority of cadets upgrading in airmanship are selected from the summer airmanship population – beginning the upgrade process in the 3^o fall. The 94 FTS will also select cadets from fall soaring to begin the soaring IP upgrade process in the 3^o spring.

POWERED FLIGHT PROGRAM (Armnsbp 420 & Armnsbp 420X) – The Powered Flight Program (PFP) serves as a capstone course/experience for cadets, tying together threads from across the core curriculum, focusing on orienting cadets toward the application of that background to airmanship and airpower concepts along with an exposure to a flying squadron environment. There are academic and flight components to the course with the potential for a pattern solo. PFP is available for all cadets, regardless of AFSC selection or career plans. Introductory Flight Screening (IFS) will continue to occur after graduation at Pueblo for cadets in flying career fields. PFP can be taken during the summer before the 1^o year, 1^o fall, or 1^o spring. Cadets cannot be enrolled in other airmanship or flying programs while participating in PFP without specific approval from the Dean of Faculty, the Commandant of Cadets, and coordination with the 306 FTG. PFP consists of approximately 20 hours of classroom instruction (ground school and USAFA academics) and 13.5 hours of flying distributed across 9 sorties (10 sorties if the cadet solos). When registering for this course, please indicate preference for first half (Armnsbp 420) or second half (Armnsbp 420X) of the semester. When possible, deconflict PFP with Phy Ed courses. For instance, if the cadet has Phy Ed in the first half of the semester (A, B, E, or F blocks), schedule Armnsbp 420X in the second half of the semester. If the cadet has Phy Ed in the second half of the semester (C, D, G, or H blocks), schedule Armnsbp 420 for the first half. Prereq: C1C standing. Pass/fail.

Actual/Projected Enrollment: (eventual annual enrollment of 650 - 750)

Fall 08	Fall 08X	Spr 09	Spr 09X	Sum 09	Fall 09	Fall 09X	Spr 10	Spr 10X
22	10	?	?	75	42	88	88	88

PHY ED REGISTRATION - Handle all Phy Ed registration (dropping classes, adding classes, changing blocks, etc.) through Phy Ed Scheduling (333-3525). DFR will not make any changes to Phy Ed courses, this semester or future semesters.

REGISTRATION CHANGES (PRESENT SEMESTER) - Registration changes outside of the normal drop/add periods must be submitted IAW the Curriculum Handbook guidelines. In general, those guidelines are:

Drops: drop current semester classes IAW the course drop timeline (Figure 2-4 in the 2008-2009 Curriculum Handbook)

Adds: no classes added after Lesson 3 without Department Head approval.

Other: APSs will be accepted by DFR for spring 09 registration changes after the registration deadline (17 Oct) if fully coordinated thru all affected departments (all adds and drops).

B. USAFA FORM 68 -- "GET WELL" PLAN

All cadets on academic probation must complete a USAFA Form 68. Cadets placed on ac pro for fall prog grades must complete a USAFA Form 68 and have it to their advisor and AOC NLT 23 Oct 08. It is the cadet's responsibility to complete the Form 68.

NOTE: The Fall 08 Prog Academic Review Committees will convene NLT 17 Oct 08. ARC letters will be distributed NLT 20 Oct 08. There are no disenroll recommendations for prog grades. Rather, ARC recommendations/directives at prog are prescriptive.

C. AAOCA and AIC MEETINGS

End-of-semester AAOCA and AIC meetings will be announced in November.

NOTE: Cadets considering a Chemistry, Biology, or Bio Chemistry major should take Chem 110 during the Spring '09 semester if currently enrolled Chem 100 this semester. Chem 110 & Chem 200 have the same rigor, but are taught in a different manner. Cadets interested in Chem 110 must take a hard copy APS to the Chemistry Dept with their advisor's signature.

D. STUDENT ACADEMIC SERVICES Student Academic Services is located on the first floor, far north end of Fairchild Hall. Entrance is through the doors located in the northwest stairwell vestibule (Commandant's Entrance - near the revolving doors). Fourthclass cadets are authorized to use the northwest stairwell, between the third and first floor, to access the Center.

A card (prox) reader has been ordered for the north, exterior, doors, but it is yet to be installed. Current course offerings are as followed:

STDY SKLS 101/102: STRATEGIES FOR ACADEMIC SUCCESS. Classes focus on time management, prioritization, test-prep, test-taking strategies, reading enhancement, note-taking and more. Volunteers should call 333-8376 or stop by Student Academic Services to discuss an individualized program or enrollment in a Study Skills course.

READ SKLS 103/103X (4°s): READING ENHANCEMENT FOR FIRST-YEAR CADETS. This course is a two-semester hour, half-semester reading skills course, tailored for fourth-class cadets, focused on improving reading rate, recall, and comprehension. There are still seats available in Reading Skills 103X this semester. Please contact Dr. Frank Gahren at 333-6839 for additional information.

READ SKLS 201/201X: READING ENHANCEMENT. This is a two-semester hour, half-semester reading skills course tailored for upperclass cadets. When registering for this course, please specify preference for taking course during first-half (e.g., Read Skls 201) or second-half of semester (e.g., Read Skls 201X). If you received credit for Read Skls 103, you may NOT enroll in Read Skls 201/201X for credit. Advisors can register cadets for Read Skls 201 or 201X via Q2.

WRITING CENTER:

Fairchild Hall, Suite 1A82 (Mon – Fri, Periods 2-6)

Cadet Library Media Center, Suite 4A59 (Sun – Thurs, 1800 – 2200)

Telephone. Days: 333-0790 or 333-0788/*Evenings:* 333-0470

Mission: *To support and promote writing and the teaching of writing in all disciplines*

Vision: *Developing better writers, one tutorial at a time*

Philosophy: *Writing Is POWER!—Plan, Organize, Write, Edit, Review/Revise*

Staffed by a dedicated team of volunteer faculty tutors, the Writing Center is an open resource center for cadets and faculty that offers assistance at any stage of the writing process.

The primary goal of the Writing Center is to provide one-on-one tutorials—guided “conversations on writing” designed to help clients see themselves as writers, identify writing strengths and weaknesses, and improve writing skills.

The Center offers assistance with basic writing skills (prewriting, generating a thesis statement, developing a draft, etc.) and special writing projects (graduate scholarship essays, letters, resumes, etc.). It also houses an extensive Writer’s Resource Library featuring books and periodicals; audio and video tapes; writing and editing software; handouts and worksheets; and reference works including dictionaries, thesauri, handbooks, and style guides.

Other services include group tutorials, writing workshops, and classroom visits to introduce cadets and faculty to services and resources and to provide more detailed information concerning the tutoring process.

Cadets planning to visit the Writing Center should schedule their appointments at least 24 hours before “paper due” dates. Walk-ins are welcome, but assistance is based on tutor availability.

To make your tutorial more productive, please observe the following guidelines:

1. Plan ahead. If possible, schedule your tutorial at least 24 hours in advance.
2. Make an appointment. Enter your name, etc., in our **sign-in log** to schedule your tutorial. **Walk-ins are accepted on a “space available” basis only**. If this is your first visit, complete the Cadet Intake Form (available from your tutor).
3. Be prompt. We cannot guarantee assistance to cadets who arrive more than 10 minutes late. NOTE: If a tutor is not available within 10 minutes of your scheduled tutorial, please let us know. (See “Contacts” below.)
4. Be prepared to provide your tutor with answers to the following questions:
 - When is this assignment due?
 - What are the guidelines for this assignment? (purpose, audience, length, research required, etc.)
 - What are your concerns about this assignment?
5. Give us your feedback! At the end of your tutorial, please take a moment to complete our Cadet Evaluation Form (“**Are You Being Served?**”).
6. Schedule a follow-up session, if desired.
7. Document your tutorial on the “Acknowledgements” page of your final paper.

To schedule a tutorial, cadets can stop by the Writing Center or call for available appointments. They may also visit the Center during normal operating hours to ask questions or check out materials.

For more information about the Writing Center, contact Prof. Durthy A. Washington, Director, or visit our web site at <http://Orion/Writing>

E. MISCELLANEOUS

SCHEDULING COMMITTEE ACTIONS (SCAs): SCAs are a CAMIS program. Each department has a POC for SCA actions; this individual should have been trained by the CAMIS programmer and received a manual. Submittals for excusals are entered in CAMIS. Mrs. Britton (DFR), DF’s representative to the USAFA Scheduling Committee, accesses all DF requests and forwards to the voting members. Reference the CAMIS web site to check [SCA](#) status.

Instructor Note: Instructors are not authorized to allow cadets to miss class, attend a different section of class, or give final exams at unpublished times without SCA approval. Cadets may bring Staff Summary Sheet (SSS) packages to instructors for coordination or approval to miss class or a related request. A SSS package is not a substitute for the SCA process. Please direct any cadets with questions to DFR; we will help them direct their request thru the proper channel.

ORDER OF PRECEDENCE: An updated USAFA Instruction 36-2014 (Allocation of Cadet Time) is published. Though a new coordination/approval process is in effect, cadets must have an approved SCA to miss class. The following is the order of precedence (prioritization of what cadets should be doing when there's a conflict):

1. Appt w/ the Superintendent, Commandant of Cadets, Dean of the Faculty, and the Director of Athletics or the Vice acting on their behalf.
 2. Courts-martial or appt with a board of officers (or appt with a Hearing Officer)
 3. Appt to appear before an MRC, ARC, PERC, STRC, or an Honor Board (to include Honor Board jury duty).
 4. Appt with Cadet Military Counsel (Defense Counsel or Judge Advocate General).
 5. Graded Reviews.
 6. Physiological training.
 7. Graduation physicals scheduled by USAFA/CWTPS or by 10 MDG/CC. Routine appts do not take precedence over class.
 8. Varsity and Junior Varsity scheduled intercollegiate competition.
 9. USAFA Command Center duty, Group or Squadron CCQ duties.
(**Note:** No cadet may miss more than two days/semester to perform Squadron CQ duty).
 10. Regularly scheduled academic, airmanship, or physical education classes.
 11. Appt w/ the Sq AOC, 306 FTG/CC, 94 FTS/CC, 98 FTS/CC, 557 FTS/CC, or 306 OSS/CC
 12. Appointment to take a make-up final exam.
- ...and so on

FINAL EXAM SCHEDULES: Cadet final exam schedules and final exam offering times have been released to cadets and departments. The deadline for cadets to make changes to their final exam schedules is 5 Nov 08. Two specific rules apply to all cadets when submitting changes: 1) a cadet cannot take an evening final followed by a morning final the next day (e.g., finals 6&7, 9&10, and 12&13); and 2) a cadet cannot take three finals in one day (e.g., finals 1&2&3, 4&5&6, 7&8&9, 10&11&12).

SECTION II

ADVISOR-IN-CHARGE (AIC) Academic Year 2008 – 2009

Major	Primary AIC	Alternate AICs
Aeronautical Engineering	Lt Col Hawkins (DFAN)	Lt Col Wisniewski (DFAN)
Astronautical Engineering	Dr. Dahlke (DFAS)	Dr. Brown (DFAS)
Bachelor of Science	Ms. Britton (DFR)	Lt Col Taylor (DFR)
Basic Sciences	Maj Nolan (DFB)	Dr. Hadfield (DFCS)
Behavioral Sciences	Lt Col Looney (DFBL)	Capt Tossell (DFBL) Capt Gibson (DFBL) Dr. Butler (DFBL) Dr. McCone (DFBL)
Biochemistry	Dr. Gardner (DFC)	Dr. Bird (DFC)
Biology	Maj Pomerinke (DFB)	Dr. Hale (DFB) Lt Col Bishop (DFB)
Chemistry	Dr. Gardner (DFC)	Dr. Bird (DFC)
Civil Engineering	Dr. Jenkins (DFCE)	Maj Bates (DFCE)
Computer Engineering	Lt Col Arb (DFEC)	Capt MacDonald (DFEC)
Computer Science	Dr. Carlisle (DFCS)	Capt Henson (DFCS)
Economics	Lt Col Kovach (DFEG)	Mr. Lucchesi (DFEG)
Electrical Engineering	Lt Col Arb (DFEC)	Capt MacDonald (DFEC)
Engineering Mechanics	Capt Snyder (DFEM)	Maj Prater (DFEM) Capt Bailey (DFEM)
English	Dr. DavisPerry (DFENG)	Dr. Diers (DFENG) Capt Mathias (DFENG)
Environmental Engineering	Dr. Jenkins (DFCE)	Maj Bates (DFCE)
Foreign Area Studies	Dr. Verano (DFF)	Maj Long (DFH)
Foreign Language	Dr. Verano (DFF)	
General Engineering	Dr. Jenkins (DFCE)	
Geospatial Science	Capt Gibson (DFEG)	Maj Stowe (DFEG) Lt Col Hart (DFEG)
History	Capt Romans (DFH)	Maj Long (DFH) Dr. Heidler (DFH)
Humanities	Dr. Gresham (DFENG)	Dr. Lemp (DFENG) Maj Long (DFH)
Legal Studies	Prof Eggers (DFL)	Prof Austin (DFL)
Management	Maj Kiefer (DFM)	Capt Atwell (DFM) Maj O'Malley (DFM)
Materials Chemistry	Dr. Gardner (DFC)	Dr. Bird (DFC)
Mathematics	Maj Richardson (DFMS)	Capt Ferguson (DFMS) Dr. Herzinger (DFMS)
Mechanical Engineering	Capt Snyder (DFEM)	Maj Prater (DFEM) Capt Bailey (DFEM)

Meteorology	Dr. Koehler (DFEG)	Maj Gauthier (DFP) Lt Col Hart (DFEG)
Military Strategic Studies	Mr. Schlagheck (DFMI)	Dr. Farquhar (DFMI)
Operations Research	Lt Col Wells (DFCS)	Maj Gonzalez (DFM) Dr. Mullin (DFEG) Lt Col Greene (DFMS)
Philosophy	Dr. Smith (DFPY)	
Physics	Lt Col Spicer (DFP)	Lt Col Franz (DFP) Dr. Patterson (DFP)
Political Science	Maj Dietzman (DFPS)	LTC Guffey (DFPS)
Social Sciences	Dr. Gordon (DFEG)	Prof Eggers (DFL) Lt Col Leftwich (DFM)
Space Operations	Maj Bayley (DFAS)	
Systems Engineering Management	Maj Gonzalez (DFM)	Dr. Davis (DFM) Capt Fedden (DFM)
Systems Engineering, Aero Sys Option	Dr. Cunningham (DFAN)	Capt Millard (DFAN) Dr. Cunningham (DFAN)
Systems Engineering, Comm Sys Option	Maj Laffely (DFEC)	Dr. Cunningham (DFAN)
Systems Engineering, Computer Sys Option	Maj Laffely (DFEC)	Dr. Cunningham (DFAN)
Systems Engineering, Control Sys Option	Lt Col Lawrence (DFAS)	Dr. Cunningham (DFAN)
Systems Engineering, Elec Sys Dsgn Option	Maj Laffely (DFEC)	Dr. Cunningham (DFAN)
Systems Engineering, Human Sys Option	Maj Tidball (DFBL)	Dr. Cunningham (DFAN)
Systems Engineering, Info Sys Option	Lt Col Boleng (DFCS)	Dr. Cunningham (DFAN) Dr. Carlisle (DFCS) Dr. Hadfield (DFCS)
Systems Engineering, Mech Sys Option	Capt Snyder (DFEM)	Maj Prater (DFEM) Capt Bailey (DFEM) Dr. Cunningham (DFAN)
Systems Engineering, Space Sys Option	Lt Col Lawrence (DFAS)	Dr. Cunningham (DFAN)

SECTION III

SUMMER 2009

ACADEMIC COURSE SCHEDULE

Period 1 31 May - 20 Jun 09	Period 2 21 Jun - 11 Jul 09	Period 3 12 Jul - 1 Aug 09
Aero Engr 315 (30)	Aero Engr 315 (30)	Astro Engr 310 (55)
Civ Engr 351 (100)	Beh Sci 310 (32)	Beh Sci 310 (32)
Comp Sci 110 (60)	El Engr 315 (24)	Biology 315 (60)
Econ 201 (24)	English 111R (xx)	Chem 200 (60)
Engr Mech 220 (30)	English 411FX (10)	Law 220 (25)
Geo 355 (6)	Math 141R (xx)	MSS 400 (40)
History 302 (24)	Math 142 (34)	Physics 110 (24)
Math 300 (34)	Physics 215 (24)	
Philos 310 (30)	Pol Sci 211 (30)	
Powered Flight Program (25)	Powered Flight Program (25)	Powered Flight Program (25)

Subject to change – updates will be posted on the Student Academic Affairs web site

SUMMER ACADEMIC REGISTRATION PROCESS

How: 1 of 2 ways

1) DFR preregisters select cadets based on ARC coordinator direction, or 2) Lottery

Where: a summer class can only be added in place of leave (Mil Tng 444), special leave (Mil Tng 446), or a summer ac placeholder (Smr Acad 700); each summer program is suffixed with letters – A thru I for the 9 weeks of the summer (1st period: AC, 2nd period: DF, 3rd period: GI). For instance, the schedule to the right is leave first period (444AC), BCT cadre second period (400DF), and OpsAF third period (201GI). This cadet could give up leave first period for a summer class. We cannot drop, add, or move any Mil Tng courses except for leave and the summer ac placeholder.

MilTng	201GI	0.00	P
MilTng	400DF	0.00	P
MilTng	444AC	0.00	P
		0.00	

- If cadets are preregistered for a summer class (visible in CAMIS/Q2 NLT 9 Mar), no other action is reqd.
- If cadets want/need a summer class (either for a summer ac + leave slot or in lieu of leave), and have not been preregistered, they fall into the lottery (16 Mar).

Lottery Process

Step 1: Cadets meet with their academic advisors/AOCAs to discuss summer ac course options (see the Summer 2009 Academic Schedule on DFR's web site)

Step 2: Fill out an APS (dated 9 Mar or later) in red ink: circle what to drop (leave or placeholder) and write in the desired course(s) to add; if there are multiple course options, provide a priority listing. If there are no alternatives, the odds of a cadet getting into a course suffer. Write on the APS any special instructions or information (e.g., 'has ac + lv slot and wants to take two summer courses').

Step 3: Drop off the annotated APS in DFR from 10 – 12 Mar, 0730 – 1600, (odds don't change whether a cadet's APS is the first dropped off on 10 Mar or the last dropped off on 12 Mar). Each APS will be assigned a unique number to be used in the 16 Mar lottery; the cadet will be given that number at the time of drop-off.

Step 4: On 16 Mar (1300 in F-1), DFR will conduct a lottery, pulling numbers at random and filling summer academic seats accordingly. Firstie (Class of 2010) APSs will be pulled first. Classes of 2011 and 2012 will be pooled together and pulled next. If a cadet's first course choice is already full, we'll go to the second choice, then third, etc. Anyone is welcome to attend the lottery; no one is required to attend to receive a seat in a summer class.

Note: *The APS must be properly annotated and list all courses the cadet can (based on summer schedule) and would be willing to take (based on preference); certain courses traditionally fill quickly (e.g., Aero 315 and/or Astro Engr 310). If the cadet only lists one course, and that course is full, there's nothing we can do without additional information/options. DFR cannot add, drop, or swap military training programs to make room for a summer academic.*

SECTION IV

SPECIAL TOPIC COURSE INFORMATION

Spring 2009

BEHAVIORAL SCIENCE AND LEADERSHIP

BEH SCI 460. SOCIAL DEVIANCE AND CONTROL. 3(1). This advanced sociology course introduces theories of deviance, social control, and their application for assessing social control policies. Specifically, this course addresses social sources, development, and determination of deviance. Students will learn evaluation research methods, theoretical application, and practice both the development and analysis of social control policy.

Final Project	Prereq: Beh Sci 350 or 360 or Dept Approval	Sem hrs: 3 spring
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BEH SCI 470. SLEEP AND CIRCADIAN RHYTHMS. 3(1). For most humans, sleep is an activity that occupies approximately one-third of their life. Despite this prominent position among human behaviors, most people know little about what happens during sleep and the significance of sleep for psychological and physiological functioning. The purpose of this course is to survey the contemporary scientific literature on sleep, emphasizing normal functioning, human performance under sleep restriction, neural mechanisms involved in sleep, and clinical sleep disorders. Students will gain familiarity with what is understood about sleep and chronobiology as well as the research methods employed in this new field of study.

Final Paper	Prereq: Beh Sci 110 & Bio 215 & Beh Sci 335, 355, 370, or 390 or Dept Approval	Sem hrs: 3 spring
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BIOLOGY

BIOLOGY 495. CANCER BIOLOGY. 3(1). This course will focus on the genetics of cancer and the associated changes in the cell biology of transformed cells. Topics such as proto-oncogenes/oncogenes, tumor-suppressor genes, genetic instability, metastasis, gene-expression, gene-regulation, viral carcinogenesis, and treatment strategies will be covered. Historical studies in cancer biology as well as current molecular investigations will be presented. The course will explore the laboratory tools and techniques used in cancer research, major discoveries in cancer biology, and the medical implications of these breakthroughs. Critical analysis of primary literature will be used to foster understanding of the strengths and limitations of various approaches to cancer research.

Final Paper	Prereq: Bio 210/215 & Bio 363 (may be waived with CD permission)	Sem hrs: 3 spring
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CIVIL ENGINEERING

CIV ENGR 495. DESIGN BUILD COMPETITION. 3(1). Students in this course will learn about the Design-Build process of delivering building construction projects. They will study the roles of the design-build team members, the steps in the process and its legal aspects. They will prepare to participate in the design-build category of the Associated Schools of Construction regional

student competition in February 2009. They will play the role of a design-build firm competing to win a project award. Student products will include a qualifications package, site plans, conceptual architectural designs, cost estimates, project schedules and construction plans. The students will also present their plans to a panel of industry representatives. They will compete against other teams from Mountain West schools. The deliverables will include the final versions of all cadet work and their lessons learned for next year's team.

Final Project & Presentation	Prereq: Civ Engr 485 or 491	Sem hrs: 3 spring
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ENGR 495. SUSTAINABLE DESIGN. 3(1). Students in this course will learn about sustainable design as it relates to the built environment. The course will be tailored to cover topics necessary to enable students to pass the national examination to become Leadership in Energy and Environmental Design (LEED) accredited professionals. Course will include studies of LEED certified buildings in the local area and other sustainable design/energy-related projects including the green roof at Peterson Air Force Base and the 2 megawatt solar array at Fort Carson. Student projects will take the format of either a case study of an existing sustainable engineering project or a proposal for a new sustainable engineering project that could be implemented at USAFA. Students will also make proposals that would assist in the implementation of the new net-zero energy initiative at USAFA.

Final Project & Presentation	Prereq: Junior or Senior standing in any engineering major or SEM major or DFCE permission	Sem hrs: 3 spring
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ECONOMICS

ECON 495. ECONOMICS OF MODERN JAPAN. 3(1). This interdisciplinary course (taught by DFEG and DFF) will examine the economy and culture of modern Japan from a domestic, regional, and global perspective. It will introduce cadets to the Japanese economic performance in the 20th century and implications for the next century. Cadets will acquire a deeper understanding of how Japan will influence the region and the global community in the years to come. Cadets will participate in a 12-day delegation trip to Tokyo and Osaka, Japan during Spring Break. Through roundtable discussions with Japanese leaders in business and academia, cadets will gain an understanding of how the Japanese people regard the future of their country within a global and regional context. Issues such as the challenges China presents in terms of economic and regional security, the problems posed by North Korea, the expanding role of Japan's military in light of constitutional constraints, environmental concerns, and the competition for natural resources will be explored and discussed. If Olmsted funding for this trip is not approved, this course will be cancelled. This course is open to a total of eight cadets: four cadets with an economics background (must have taken either Econ 301 or Econ 355) and four cadets with a Japanese language background (must have taken Japanese 221 or above). Preference will be given to C1C and C2C cadets, but others may apply. Cadets interested in taking this course should email Professor Yumiko Guajardo (DFF) or Lt Col Dan Driscoll (DFEG) to apply.

Final Paper	Prereq: Econ 301 or 355; Japanese 221	Sem hrs: 3 Spring
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ENGLISH

ENGLISH 495. GOTHIC LITERATURE: FROM HAUNTED CASTLES TO HAUNTED SPACESHIPS. 3(1). This course will test the boundaries of the term "gothic" in order to gain an understanding of why "dark" tropes such as haunted spaces, the "final female," labyrinths, fear of the "other," sins of the father, etc., continue to haunt other literary genres and forms of media. By exploring these gothic mutations, we will discover ways in which human manifestations of fear and anxiety change over time; thus revealing how literary movements survive beyond their canon appointed period. The semester will begin with what purists call the first gothic novel (*Castle of Otranto*) then move on to another classical text (*Frankenstein*). Like *Dracula*, our journey will take us across the ocean in search of "new blood." There we will read a variety of American gothic short stories and novels. Finally, we will venture to the outer reaches of the genre and space with Ridley Scott's film *Alien*.

Final Paper	Prereq: English 111	Sem hrs: 3 spring
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FOREIGN AREA STUDIES

FORARSTU 495. BLOOD ON THE SNOW: WAR AND SOCIETY IN RUSSIA AND INNER EURASIA. 3(1). An advanced course on warfare and the interaction of the military and other aspects of society in Inner Eurasia – defined as the Eurasian continent exclusive of Scandinavia, Western and Southern Europe, the Middle East, India, and China. It is perhaps most easily conceived as the area covered by the Russian Empire at its greatest extent. This is an area of immense human diversity – different languages, different ethnicities and nationalities, different religions. While the area was eventually politically unified under the Russian Empire, and later the Soviet Union, that diversity continued undiminished. That diversity resulted in many different ways of war. Thus, the Russians developed a uniquely flexible military both to protect against the "civilized" peoples of Europe and to expand their power southward and eastward against the "uncivilized" peoples of the Caucasus, Central Asia, and Siberia. When the Romanov monarchy collapsed in 1917 and the Bolsheviks seized power, the diversity of the Russian Empire became overlaid with a Marxist ideology that also overlaid the military doctrine and organization of the new Union of Soviet Socialist Republics (USSR). This took the new Red Army down an uncharted path to triumph, tragedy, and ultimately dissolution. Today, the Russian Federation remains a powerful military force in the world, while some of the other successor states have developed into significant regional powers, or deteriorated into significant regional crises. U.S. Air Force officers of the future are well-advised to understand something of this group of nations, potential friends and potential foes. Students with the appropriate language skills are encouraged to choose additional readings in Inner Eurasian languages to support their final project.

Final Project	Coreq: History 202/302	Sem hrs: 3 spring
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FOREIGN LANGUAGE

ARABIC 495. ARABIC IN EGYPTIAN FILM & MODERN LITERATURE. 3(1). Advanced Arabic course which develops whole language skills in Modern Standard Arabic with active speaking and listening skills in the Egyptian dialect. Upon completion of this course the cadets will have the tools necessary to understand and produce all the basic structures of Modern Standard Arabic with proficiency in using the Egyptian dialect. Egyptian film will be used in class and selected short stories from modern Egyptian literature will be introduced.

Oral recorded presentation & Final Exam	Prereq: Arabic 322	Sem hrs: 3 spring
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CHINESE 495. INTRODUCTION TO CHINESE NEWS READING. 3(1). This course will be taught in seminar format. This course introduces students how to approach journalist reports in Chinese through analyzing the news titles/ subtitles, the key terms/ expressions, the format of news report and the cultural/ historical backgrounds embodied in the reports. In addition to traditional newspapers, students will also explore on-line Chinese news agencies in Chinese speaking communities around the world. This course helps students become more linguistically and culturally competitive through correctly decoding authentic materials.

Final Paper & Final Exam	Prereq: Chinese 222 and above or equivalent	Sem hrs: 3 spring
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FRENCH 495. FRANCOPHONE FILM. 3 (1). This course introduces the student to the study of major issues in both Northern and Sub-Saharan Francophone Africa. The course is divided into three main parts covering Film Theory, post/colonialism viewed by the Father of Blackness, Aimé Césaire, and current cultural realities in Africa such as the status of Women, the life of Africans in exile, and dictatorships. The first part focuses on the theory of Film. The second part deals with the fundamental question of blackness today after the colonial empire. It explores the role of women in Africa, the dictatorships in place and examines the woes of exile. The last part deals with the question of immigration in Europe and the social position of second generation immigrants. The course main objective is to expand the student's knowledge by exposing him/her to issues through the eyes of the African directors. This course is taught in French.

Final Paper & Final Exam	Prereq: French 322	Sem hrs: 3 spring
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GEOSPATIAL SCIENCE

GEO 495. ADVANCED REMOTE SENSING. 3(1). In this course, students will explore advanced analysis techniques for extracting information from satellite imagery. Imagery of various spatial and spectral scales will be used, including thermal-infrared and radar imagery. The goal of this course is to provide students with experience in tackling geospatial problems with remote sensing data—from development of the questions, to identification of the necessary data, and finally selection and execution of appropriate analysis techniques. The course will include several case studies and will culminate in a final project.

Final Project	Prereq: Geo 382	Sem hrs: 3 spring
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HISTORY

HISTORY 495. THE ERA OF THE AMERICAN REVOLUTION. 3(1). This course will cover the causes and meaning of the American Revolution, from its origins during the French and Indian War to the election of Thomas Jefferson as President in 1800. It examines the intellectual, political, economic, and military causes of the American Revolution in depth, breadth, and context. It also explores the process by which different colonies/states came to embrace Revolution and independence, and how shifting political coalitions came together to shape a new government, as well as chart the political and economic course of the early republic. Course includes optional trip to Boston over Spring break.

Final Exam and final paper	Prereq: none	Sem hrs: 3 spring
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HUMANITIES

HUM 495. GREECE AND THE HELLENISTIC WORLD. 3(1). The purpose of this seminar course is to give Humanities students a detailed understanding of Greek history and culture from the Archaic, Classical, and Hellenistic periods. This course will also emphasize the theory and practice of early democracy and its influence on modern society as well as the warfare and military innovations of the ancient world. The course objectives include developing an understanding of Greek military and political institutions and the advent of democracy by studying the writings of Hesiod, Aristotle, Herodotus and Thucydides. We will also examine Greek philosophy, science, drama, art, and architecture with a focus on how Greek thinking influenced Western Europe and the modern world. This course will be interdisciplinary with certain lessons taught by Dr Rhonda Smith of Philosophy and Dr Richard Lemp from English.

Final Paper & Final Exam	Prereq: History 101	Sem hrs: 3 spring
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LAW

LAW 495. CORRUPTION CONTROL AND PUBLIC INTEGRITY LAW. 3(1). In furtherance of USAFA's mission to develop Officers of Character, the Law Department offers a topics course on Public Integrity Law in Spring, 2009. This area of law governs the behavior of and sets values for public officials, the military, and civil servants. Since integrity became a distinct part of American law in the late 19th century, there have been important shifts in the identification of legal violations of integrity in the executive branch, especially. The recent shift from an all encompassing, compliance regime, to a more flexible set of laws, regulations, and mandated oversight procedures is particularly interesting. As new questions of integrity are raised, such as letting sole source contracts in conflict zones and at the site of natural disasters, plus the oversight problem presented by armed security contractors at similar locations, it is necessary for the Congress and the President to decide whether to "reinvent or modify" public integrity law. The seminar will consider the power of the executive to monitor itself and the effectiveness of that monitoring. The topic also includes legal regulation of legislative ethics and a review of the separate field of campaign finance law. The seminar goal is to gain an understanding of integrity law as applied to existing and emerging problems of accountability and public trust. The course is taught by Distinguished Visiting Professor Anechiarico, who has written extensively in this area.

Final Paper	Prereq: Law 220	Sem hrs: 3 spring
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MILITARY STRATEGIC STUDIES

MSS 495. ARMED GROUPS AND ASYMMETRIC WARFARE. 3(1). This seminar focuses on non-state threats and discusses theories, doctrines, and operational concepts related to various forms of asymmetric warfare. Cadets explore the effectiveness of high/low-tech, kinetic/non-kinetic, and regular/irregular warfare methods in contemporary conflicts. Operational focus is on armed groups such as terrorists, insurgents, militias and criminal organizations. We will discuss how they have adapted in the past, their contemporary contexts, capabilities and motivations, as well as states' counterstrategies. Particular attention is paid to anticipating opportunities and vulnerabilities. Course is adapted from a cutting-edge syllabus in development for the US defense and intelligence community.

Final Paper	Prereq: none	Sem hrs: 3 spring
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POLITICAL SCIENCE

POL SCI 495. COMPARATIVE POLITICAL THEORY. 3(1). This course compares selected texts in Western and Eastern political thought with a focus on the ultimate foundation(s) for basic political principles such as justice and order. A special focus will be the relationship between reason, religious faith, and custom as sources of authority in political thinking and action. Major Eastern traditions and texts will include Islam, Hinduism, and Confucianism. Western texts on religion, philosophy, and sources of political authority will be interspersed with readings from classic Eastern texts, 20th century political works by Eastern thinkers, and contemporary scholarship. Possible texts include, from Islam, Al Farabi, Ibn Rushd, Ibn Sinna, Qutb, and Khomeini; from Hinduism, the Vedas and Gandhi; from the Chinese tradition, Confucius; from the Western tradition, Plato, Aquinas, and Locke. Guest lectures, focusing on particular countries or regions, will augment the focus on theory and texts. This is a seminar course, emphasizing discussion and written essays.

Final Paper	Prereq: Philos 310 or Pol Sci 301	Sem hrs: 3 spring
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