Frank COPY

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP

****** ELECTRICAL ENGR & COMPUTER SCI ******

TBA

Buchner
Lee White

20 INTRO To ECE

✓ 88493 EECS 233   INTRO DATA STRUCTURES   4.0   T R   0245-0400PM   ~~LIBERATORE,~~ VINGENZO   ROCK 301   204

Prereq: ENGR 131.

PRIOR ENROLLMENT: 78
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

88547 EECS 245   ELECTRONIC CIRCUITS   4.0   M W F   1130-1220PM   YOUNG, DARRIN   WHTE 411   100
                                                M   0545-0700PM   WHTE 411   100
                                                  R   0115-0230PM   GLEN 308   56

Prereq: ENGR 210. Coreq: MATH 224.

PRIOR ENROLLMENT: 47
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

89095 EECS 281   LOGIC DESIGN AND COMPUTER ORG   4.0   T R   1000-1115AM   30   ~~MERAT, FRANCIS L~~ *delete*   CLPP 108   126
                                                          M   1130-1220PM   EMELKO, GLENN A   GLEN 308   56

Prereq: ENGR 131.

PRIOR ENROLLMENT: 9
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

89111 EECS 281   LOGIC DESIGN AND COMPUTER ORG   4.0   T R   1000-1115AM   30   MERAT, FRANCIS L.   CLPP 108   126
                                                          M   0130-0220PM   EMELKO, GLENN A   GLEN 308   56

Prereq: ENGR 131.

PRIOR ENROLLMENT: 23
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

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CRN   SUBJ CRSE CMT COURSE TITLE                     CRHR       DAY(S) TIME        LMT  INSTRUCTOR(S)                  BLDG ROOM  CAP
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89069 EECS 281     LOGIC DESIGN AND COMPUTER ORG    4.0          T R    1000-1115AM 30   MERAT, FRANCIS L.              CLPP 108   126
                                                                 T      0115-0205PM      EMELKO, GLENN A               GLEN 308   56

Prereq: ENGR 131.                                                          PRIOR ENROLLMENT:    26
                                                                           COURSE TYPE:  LECTURE

START DATE: 01/12/04        END DATE: 05/06/04



89133 EECS 301     DIGITAL LOGIC LABORATORY         2.0          F      0130-0220PM      SAAB, DANIEL                  GLEN 308   56

Prereq: EECS 281.                                                          PRIOR ENROLLMENT:    28
                                                                           COURSE TYPE:  LABORATORY

START DATE: 01/12/04        END DATE: 05/06/04



                                                                                         CHANKONG
88589 EECS 304     CONT ENGR I WITH LAB             3.0          M W F  0130-0220PM 48   LIN, WEI                      GLEN 716   40

Prereq: EECS 212.                                                          PRIOR ENROLLMENT:    16
                                                                           COURSE TYPE:  LECTURE

START DATE: 01/12/04        END DATE: 05/06/04



                                                                                         CHANKONG
88607 EECS 305     CONTROL ENGINEERING LAB I        1.0          TBA                     LIN, WEI

Prereq: EECS 212 or equivalent. Coreq: EECS 304.                           PRIOR ENROLLMENT:    15
                                                                           COURSE TYPE:  LABORATORY

START DATE: 01/12/04        END DATE: 05/06/04



88518 EECS 309     ELECTROMAGNETIC FIELDS I         3.0          M W F  0130-0220PM      TABIB-AZAR, M                 WHTE 411   100

Prereq: MATH 223 and PHYS 122. Coreq: MATH 224.                            PRIOR ENROLLMENT:    39
                                                                           COURSE TYPE:  LECTURE

START DATE: 01/12/04        END DATE: 05/06/04
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CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP

~~68479~~ ~~EECS~~ ~~311~~ ~~ELECTROMAGNETIC FIELDS II~~ ~~3.0~~ ~~M W F~~ ~~0130-0220PM~~ ~~MERAT, FRANGIS L.~~ OLIN 314 32 *delete*

Prereq: EECS 309.

PRIOR ENROLLMENT: 8
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

EECS 310   ELECTROMECHANICAL ENERGY CONV.   TR 1000-1115   NEWMAN, W
LAB   M 1230-230
LAB   M 0230-0430   T 0700-0900-LAB

88673 EECS 313   SIGNAL PROCESSING   3.0   M W F 0230-0320PM   BUCHNER, MARC   OLIN 313   50

Prereq: EECS 246.

PRIOR ENROLLMENT: 21
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

TBA   *STAFF*

89205 EECS 314   COMPUTER ARCHITECTURE   3.0   ~~M W~~   ~~0430-0545PM~~   ~~SCHULTZ, WILLIAM LOUIS~~   CLPP 108 126

Prereq: EECS 281.

PRIOR ENROLLMENT: 106
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

89179 EECS 315   DIGITAL SYSTEMS DESIGN   4.0   T R   0115-0230PM   SAAB, DANIEL   ROCK 301   204

Prereq: EECS 281.

PRIOR ENROLLMENT: 65
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

66700 EECS 316   COMPUTER DESIGN   3.0   F   0330-0445PM   PAPACHRISTOU, CHRISTOS A.   OLIN 313   50

Prereq: EECS 281; EECS 315 or consent of instructor.
          LAB WILL BE HELD IN OLIN 411.

PRIOR ENROLLMENT: 19
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP
=====	====	====	===	==============================	==========	=======	===========	===	============================	====	=====	===
88621	EECS	321		SEMICONDUCT ELECTRONIC DEVICES	4.0	M W F	0930-1020AM		ZORMAN, CHRISTIAN AARON	WHTE	411	100

Prereq: EECS 309.

PRIOR ENROLLMENT: 36
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 89220 | EECS | 337 | | SYSTEMS PROGRAMMING | 4.0 | M W F | 1030-1120AM | | ERNST, GEORGE W. | CLPP | 108 | 126 |

Prereq: EECS 233 and EECS 281.

PRIOR ENROLLMENT: 42
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 89392 | EECS | 338 | | INTRO TO OPERATING SYSTEMS | 4.0 | T R | 0410-0530PM | 37 | OZSOYOGLU, GULTEKIN | MILL | SHMT | 382 |
| | | | | | | M | 0430-0520PM | | | WICK | 306 | 40 |

Prereq: EECS 337.

PRIOR ENROLLMENT: 30
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 89263 | EECS | 338 | | INTRO TO OPERATING SYSTEMS | 4.0 | T R | 0410-0530PM | 36 | OZSOYOGLU, GULTEKIN | MILL | SHMT | 382 |
| | | | | | | W | 0830-0920AM | | | OLIN | 313 | 50 |

Prereq: EECS 337.

PRIOR ENROLLMENT: 24
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 89406 | EECS | 338 | | INTRO TO OPERATING SYSTEMS | 4.0 | T R | 0410-0530PM | 37 | OZSOYOGLU, GULTEKIN | MILL | SHMT | 382 |
| | | | | | | R | 0115-0205PM | | | WICK | 316 | 42 |

Prereq: EECS 337.

PRIOR ENROLLMENT: 29
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP
✓ 89314	EECS	340		ALGORITHMS & DATA STRUCTURES	3.0	T R	0245-0400PM	30	~~SAHINALP, CENK~~ *Vincenzo L iberatore*	GLEN	716	40

Prereq: EECS 233 and MATH 304.

PRIOR ENROLLMENT: 18
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| ✓ 89323 | EECS | 341 | N | INTRO TO DATABASE SYSTEMS | 3.0 | T R | 1000-1115AM | 30 | OZSOYOGLU, MERAL | BING | 103 | 124 |

Prereq: EECS 233.   ENROLLMENT RESTRICTED TO CS, CE, EE AND SY MAJORS.

PERMIT

PRIOR ENROLLMENT: 52
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| ✓ 89346 | EECS | 343 | X | THEORETICAL COMPUTER SCIENCE | 3.0 | M W F | 0130-0220PM | | BRANICKY, MICHAEL STEPHEN | WICK | 322 | 90 |

Prereq: MATH 304.   XLIST: MATH 343

PRIOR ENROLLMENT: 62
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 88650 | EECS | 344 | | ELECTRONIC ANALYSIS & DESIGN | 3.0 | M W F | 0230-0320PM | | YOUNG, DARRIN | OLIN | 314 | 32 |

Prereq: EECS 245.

PRIOR ENROLLMENT: 25
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 89358 | EECS | 345 | | PROGRAMMING LANGUAGE CONCEPTS | 3.0 | T R | 0245-0400PM | | ZHANG, GUO-QIANG | WHTE | 411 | 100 |

Prereq: EECS 233, EECS 337.   *Cancel*

PRIOR ENROLLMENT: 65
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP
88703	EECS	346		ENGINEERING OPTIMIZATON	3.0	T R	~~0410-0530PM~~ *0600-0830*		CHANKONG, VIRA	OLIN	313	50

Prereq: MATH 201.

PRIOR ENROLLMENT: 20
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 84999 | EECS | 347 | | NETWORK SYNTHESIS | 3.0 | M W F | 0930-1020AM | | STAFF | WHTE | 322 | 29 |

Prereq: EECS 246 or equivalent.

PRIOR ENROLLMENT: 0
COURSE TYPE: RESEARCH

START DATE: 01/12/04   END DATE: 05/06/04

| 88729 | EECS | 350 | | INDUST & PRODUCTION SYS ENGR | 3.0 | T R | 0245-0400PM | 30 | MALAKOOTI, BEHNAM | OLIN | 314 | 32 |

MECHANICAL ENGINEERING GRADUATING SENIORS MAY TAKE THIS
COURSE IN PLACE OF EECS 352 (ENGINEERING ECONOMICS) WITH
THE APPROVAL OF PROF. MALAKOOTI.

PRIOR ENROLLMENT: 17
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 88756 | EECS | 354 | | DIGITAL COMMUNICATIONS | 3.0 | M W F | 1030-1120AM | | HAZONY, DOV | GLEN | 716 | 40 |

Prereq: EECS 351 recommended.

PRIOR ENROLLMENT: 23
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

66 Computer GRAPHIS   MW0330-0445 CAVUSOGLU

| 89512 | EECS | 375 | X | AUTONOMOUS ROBOTICS | 3.0 | T R | 0830-1115AM | 21 | DRUSHEL, RICHARD FREDERICK CHIEL, HILLEL J. | OLIN | 803 | 36 |

Prereq: Consent of instructor.
          XLIST: BIOL 375
          PERMIT CARD TO BE PICKED UP FROM PROF. DRUSHEL ONLY.
PERMIT

PRIOR ENROLLMENT: 21
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

EECS 381 HYBRID SYSTEMS   MW 0330-0445 BRANIKY

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP

G. Q. Zhang

✓ 89503 EECS 391   INTRO ARTIFICIAL INTELLIGENCE   3.0   T R   0115-0230PM   50 ~~BEER, RANDALL DEAN~~   BING 103   124

Prereq: ENGR 131.

                                                PRIOR ENROLLMENT: 59
                                                COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

66688 EECS 396   N COMP GRAPHICS FOR SIMULATION   3.0   T R   1000-1115AM   CAVUSOGLU, CENK   KHSM 123   40

Prereq: EECS 233 or permission of instructor.
                  COURSE WILL BE TAUGHT IN SAME ROOM AS EECS 600 (52645),
                  PROF. CAVUSOGLU'S SPECIAL TOPICS COURSE.
PERMIT   PRIOR ENROLLMENT: 9
                                                COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

V1216 EECS 396L   SPECIAL TOPICS   1.0 - 6.0 TBA   STAFF
                                                PRIOR ENROLLMENT: O
                                                COURSE TYPE: RESEARCH

START DATE: 01/12/04   END DATE: 05/06/04

✓ V2350 EECS 396M N SPEC TOP: COMPUTER SCIENCE   1.0 - 9.0 TBA   STAFF
PERMIT   PRIOR ENROLLMENT: O
                                                COURSE TYPE: INDEPENDENT STUDY

START DATE: 01/12/04   END DATE: 05/06/04

88869 EECS 398L   SENIOR PROJ IN ELEC ENGR I   4.0   M W   1230-0120PM   SREENATH, NARASINGARAO   WHTE 411   100
                                                                                     ~~MALAKOOTI, BEHNAM~~
                                                PRIOR ENROLLMENT: 4
                                                COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP
=====	======	======	=====	==============	======	========	======	=====	===============	======	======	=====
69033	EECS	398N	K	ENGINEERING PROJECTS I	4.0	M W	1230-0120PM		SREENATH, NARASINGARAO ~~MALAKOOTI, BEHNAM~~	WHTE	411	100

Prereq: Senior standing.

PRIOR ENROLLMENT: 3
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 88895 | EECS | 399L | | SENIOR PROJ IN ELEC ENGR II | 4.0 | M W | 1230-0120PM | | ~~MALAKOOTI, BEHNAM~~ SREENATH, NARASINGARAO | WHTE | 411 | 100 |

Prereq: EECS 398L (or concur).

PRIOR ENROLLMENT: 28
COURSE TYPE: INDEPENDENT STUDY

START DATE: 01/12/04   END DATE: 05/06/04

| 89464 | EECS | 399M | | COMPUTER ENG DESIGN PROJECT | 4.0 | M W | 1230-0120PM | | ~~MALAKOOTI, BEHNAM~~ SREENATH, NARASINGARAO | WHTE | 411 | 100 |

Prereq: Senior standing.

PRIOR ENROLLMENT: 35
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 69057 | EECS | 399N | K | ENGINEERING PROJECTS II | 4.0 | M W | 1230-0120PM | | SREENATH, NARASINGARAO ~~MALAKOOTI, BEHNAM~~ | WHTE | 411 | 100 |

Prereq: Senior standing.

PRIOR ENROLLMENT: 10
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

SPRING 2004 - TURNAROUND DOCUMENT   DUE TO DEAN: 9/   TO REGISTRAR: 9/19/03   04/30/03

CRN   SUBJ CRSE CMT COURSE TITLE   CRHR   BLDG ROOM CAP
===== ==== ==== === === ==========   ===== ==== ===== ===

89016 EECS 400T   GRADUATE TEACHING I   0.0

Prereq: Ph.D. student in EECS department.

START DATE: 01/12/04   END DATE: 05/06/04

88852 EECS 413   NONLINEAR SYSTEMS I   3.0

Coreq: EECS 408.
                    STUDENTS MAY REGISTER FOR EECS 600, #5609,
                    OPTIMAL CONTROL."
                                                                    PRIOR ENROLLMENT:
                                                                    COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

EECS 409   Discrete Event System   MW   BRANIKY,

95025 EECS 414   COMPLEX SYS MODELING & ANALY   3.0   W   0500-0730PM   MESAROVIC, MIHAJLO D.   OLIN 314   32
                    FIRST MEETING WILL BE IN OLIN 408.
                                                                    PRIOR ENROLLMENT: 25
                                                                    COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

~~95057 EECS 418   SYS IDENT & ADAPTIVE CONTROL   3.0   T R   0430-0545PM   BUCHNER, MARC   OLIN 314~~   32
                                                                    PRIOR ENROLLMENT: 9
                                                                    COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

~~66121 EECS 421   X OPTIMIZATION OF DYNAMIC SYST   3.0   M W   0330-0445PM   CHANKONG, VIRA   OLIN 313   50~~

Prereq: EECS 408.
                    XLIST: MATH 434
                    STUDENTS MAY REGISTER FOR EECS 600, #56091, "NONLINEAR AND
                    OPTIMAL CONTROL."
                                                                    PRIOR ENROLLMENT: 0
                                                                    COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

PROPOSED CHANGE: CHECK WITH MERAL

EECS 400T – GRADUATE TEACHING I – ~~G. ZHANG~~ G. ERNST
NOTE: CS STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 400T – GRADUATE TEACHING I – V. CHANKONG
NOTE: EE, CE AND SY STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 500T – GRADUATE TEACHING I – ~~G. ZHANG~~ G. ERNST
NOTE: CS STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 500T – GRADUATE TEACHING I – V. CHANKONG
NOTE: EE, CE AND SY STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 600T – GRADUATE TEACHING I – ~~G. ZHANG~~ G. ERNST
NOTE: CS STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 600T – GRADUATE TEACHING I – V. CHANKONG
NOTE: EE, CE AND SY STUDENTS SHOULD REGISTER FOR THIS CLASS

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP
95066	EECS	422		SOLID STATE ELECTRONICS II	3.0	T R	1000-1115AM		TABIB-AZAR, M	GLEN		

CLASS WILL BE HELD IN A GLENNAN CONFERENCE ROOM.

PRIOR ENROLLMENT: 8
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

89453 EECS 425   COMPUTER COMMUNICATION NETWORK 3.0   T R   0415-0530PM   30 ERGUN, FUNDA   WICK 317   49

Prereq: EECS 338.   *Canal*

PRIOR ENROLLMENT: 31
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

~~89855 EECS 426   MOS INTEGRATED CIRCUIT DESIGN 3.0   T R   0415-0530PM   GARVERICK, STEVE   WHITE 324~~   48

Prereq: EECS 344 and EECS 321.

PRIOR ENROLLMENT: 15
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

89422 EECS 430   OBJECT-ORIENTED SOFTWARE DEVLP 3.0   W   0600-0830PM   WHITE, LEE J.   OLIN 313   50

Prereq: EECS 337 or consent of instructor.

PRIOR ENROLLMENT: 29
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

~~88962 EECS 434   MICROFABRICAT SILICON ELE SYS 3.0   M W F   1030-1120AM   MEHREGANY, MEHRAN   BING 305   40~~

Prereq: EECS 322 or EECS 415.

PRIOR ENROLLMENT: 0
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP
63515	EECS	435		DATA MINING ~~delete~~	3.0	T R	0115-0230PM		OZSOYOGLU, MERAL	TBS		

Prereq: EECS 341 or equivalent.

START DATE: 01/12/04   END DATE: 05/06/04

PRIOR ENROLLMENT: 0
COURSE TYPE: LECTURE

EECS 444 Computer Security

~~Computer Security~~ *Andy Podgurski*

TR 2:45—4:00

delete

| ~~88945~~ | ~~EECS~~ | ~~450~~ | | ~~PRODUCTION & OPERATION SYSTEMS~~ | ~~3.0~~ | ~~T R~~ | ~~0245-0400PM~~ | ~~15~~ | ~~MALAKOOTI, BEHNAM~~ | ~~OLIN~~ | ~~314~~ | ~~32~~ |

PRIOR ENROLLMENT: 4
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| 63539 | EECS | 452 | | RANDOM SIGNALS | 3.0 | M W | 0330-0445PM | | HAZONY, DOV | GLEN | 716 | 40 |

PRIOR ENROLLMENT: 7
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

| ✓89371 | EECS | 454 | X | ANALYSIS OF ALGORITHMS | 3.0 | T R | 1000-1115AM | | ~~SAHINALP, CENK~~ *G.Q. Zhang* | WICK | 317 | 49 |

Prereq: MATH 304 and (EECS 340 or EECS 405).
                    XLIST: OPRE 454

PRIOR ENROLLMENT: 16
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

EECS 466 Computer Graphics   MW 0330-0445 CAVUSOGLU

| ✓89291 | EECS | 475 | X | AUTONOMOUS ROBOTICS | 3.0 | T R | 0830-1115AM | 3 | DRUSHEL, RICHARD FREDERICK | OLIN | 803 | 36 |
| | | | | | | | | | CHIEL, HILLEL J. | | | |

Prereq: Consent of instructor.
                    XLIST: BIOL 475
                    PERMIT CARD TO BE PICKED UP FROM PROF. DRUSHEL ONLY.
PERMIT   PRIOR ENROLLMENT: 1
                                            COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ CRSE CMT COURSE TITLE	CRHR	DAY(S) TIME	LMT	INSTRUCTOR(S)	BLDG ROOM CAP

60026 EECS 478 X COMPUTATIONAL NEUROSCIENCE 3.0 T R 0245-0400PM BEER, RANDALL DEAN CLPP 304 24
CHIEL, HILLEL J.
[handwritten: 477 Dynamics of Adaptive Behavior]
[handwritten: delete]
XLST: BIOL 478, EBME 478, NEUR 478
PRIOR ENROLLMENT: 10
COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

[handwritten: EECS477 Dynamics of Adaptive Behavior, 3.0, TR 2:45-4:00 Randy Beer]

93312 EECS 483   DATA ACQUISITION AND CONTROL   3.0   T R   0115-0230PM   NEWMAN, WYATT S.   BAKE B5   57
PRIOR ENROLLMENT: 5
COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

89548 EECS 483 N DATA ACQUISITION AND CONTROL   3.0   T R   0115-0230PM   NEWMAN, WYATT S.   BAKE B5   57
PERMIT CARDS MAY BE OBTAINED FROM GLEN 312. THIS
COURSE SECTION ONLY FOR STUDENTS IN THE INSTRUCTIONAL
TELEVISION NETWORK PROGRAM.
PERMIT   PRIOR ENROLLMENT: 3
                                          COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

89182 EECS 488   EMBEDDED SYSTEM DESIGN   3.0   R   0630-0900PM   PAPACHRISTOU, CHRISTOS A.   OLIN 313   50
PRIOR ENROLLMENT: 21
COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

95319 EECS 500   EECS COLLOQUIUM   0.0   T R   1130-1230PM   BEER, RANDALL DEAN   WHTE 411   100
PRIOR ENROLLMENT: 83
COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP

✓ 89027 EECS 500T GRADUATE TEACHING II 0.0 TBA ~~WHITE, LEE~~ J.

George E Mast

Prereq: Ph.D. student in EECS department.

PRIOR ENROLLMENT: 11
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

EECS 500T GRADUATE TEACHING   TBA   GARVERICK, S.

63568 EECS 526 MIXED-SIGNAL SYSTEMS 3.0 T R 0115-0230PM GARVERICK, STEVE GLEN 716 40

Prereq: EECS 426.

EECS 526 MAY BE TAKEN CONCURRENTLY WITH EECS 426 WITH
PERMISSION OF INSTRUCTOR.

PRIOR ENROLLMENT: 8
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

93240 EECS 550 X NEUROMECHANICS SEMINAR 0.0 M W 1230-0120PM RITZMANN, ROY E. DGRC 312 140
CRAGO, PATRICK E.

XLIST: EBME 550

PRIOR ENROLLMENT: 3
COURSE TYPE: SEMINAR

START DATE: 01/12/04   END DATE: 05/06/04

~~63573 EECS 589 ROBOTICS II 3.0 M W F 0230-0320PM NEWMAN, WYATT S. GLEN 716 40~~

Prereq: EECS 489.

PRIOR ENROLLMENT: 10
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

~~63596 EECS 591 INTELLIGENT SYSTEMS II 3.0 M W 0330-0445PM BRANICKY, MICHAEL STEPHEN WHTE 324 48~~
PRIOR ENROLLMENT: 18
COURSE TYPE: LECTURE

START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP

V2346 EECS 600   SPECIAL TOPICS   1.0 - 18.0 TBA   STAFF
                    Delete   PRIOR ENROLLMENT: 0
                                                       COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

63602 EECS 600   SP TPC:APP-LEV WEB COMPUTING 1.0 - 18.0 M W F 0230-0320PM   OZSOYOGLU, GULTEKIN   WICK 301   40
                    Delete   PRIOR ENROLLMENT: 3
                                                           COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

600   SYSTEM BioLoGY   T 0500-0700 MESAROVIC

63617 EECS 600   N SP TPC:COMPUT GRAPH FOR SIMUL 1.0 - 18.0 T R   1000-1115AM   CAVUSOGLU, CENK   KHSM 123   40
                    TAUGHT IN SAME ROOM AS EECS 396.
PERMIT   PRIOR ENROLLMENT: 8
                                                          COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

63626 EECS 600   SP TP:LOGIC-BASED DISCR OPTIM 1.0 - 18.0 M   0600-0830PM   CHANKONG, VIRA   OLIN 313   50
                                                          PRIOR ENROLLMENT: 7
                                                          COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

66238 EECS 600   TP:ROUTING/SCHED ON INTERNET 1.0 - 18.0 T R   0115-0230PM   12 ERGUN, FUNDA   ROCK 304   32
                    PREREQ: EECS 425 AND PERMISSION OF INSTRUCTOR.
                    Delete   PRIOR ENROLLMENT: 10
                                                          COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

66288 EECS 600   TP: GENOME PATHWAYS DATABASES 1.0 - 18.0 T R   0115-0230PM   OZSOYOGLU, MERAL   SMTH 228   30
                    Delete   PRIOR ENROLLMENT: 7
                                                          COURSE TYPE: LECTURE
START DATE: 01/12/04   END DATE: 05/06/04

CRN	SUBJ	CRSE	CMT	COURSE TITLE	CRHR	DAY(S)	TIME	LMT	INSTRUCTOR(S)	BLDG	ROOM	CAP

~~69517 EECS 600   TP:NONLINEAR & OPTIMAL CONTRL   1.0 - 18.0   T R   0245-0400PM   LIN, WEI   YOST 101   30~~

PREREQ: EECS 408
                                                                PRIOR ENROLLMENT: 2
START DATE: 01/12/04   END DATE: 05/06/04   COURSE TYPE: LECTURE

95104 EECS 600   SP TPC: COMPUTER SECURITY   1.0 - 18.0 M W   0330-0445PM   PODGURSKI, H.A.   WHTE 411   100
                                                                PRIOR ENROLLMENT: 27
START DATE: 01/12/04   END DATE: 05/06/04   COURSE TYPE: LECTURE

89040 EECS 600T   GRADUATE TEACHING III   0.0   TBA   ~~WHITE, LEE~~ J.

Prereq: Ph.D. student in EECS department.
                                                                PRIOR ENROLLMENT: 9
START DATE: 01/12/04   END DATE: 05/06/04   COURSE TYPE: LECTURE

V1084 EECS 601   INDEPENDENT STUDY   1.0 - 18.0 TBA   STAFF
                                                                PRIOR ENROLLMENT: 0
START DATE: 01/12/04   END DATE: 05/06/04   COURSE TYPE: INDEPENDENT STUDY

V2348 EECS 602   ADVANCED PROJECTS LAB   1.0 - 18.0 TBA   STAFF
                                                                PRIOR ENROLLMENT: 0
START DATE: 01/12/04   END DATE: 05/06/04   COURSE TYPE: LABORATORY

DRAFT ECE CHANGES TO SPRING 2004 TURNAROUND DOCUMENT:

COURSES TO BE DROPPED:
EECS 311 ELECTROMAGNETIC FIELDS II
EECS 347 NETWORK SYNTHESIS
EECS 350/450 INDUSTRIAL PRODUCTION SYSTEMS (for moment)
EECS 413 NONLINEAR CONTROL (for moment)
EECS 418 SYSTEM IDENTIFICATION
EECS 421 DYNAMIC OPTIMIZATION
EECS 426 CMOS IC DESIGN
EECS 434 MICROFABRICATED SILICON SYSTEMS
EECS 589 ROBOTICS II
EECS 591 INTELLIGENT SYSTEMS II
ALL EECS 600 COURSES

COURSES TO BE ADDED:
EECS 310 ELECTROMECHANICAL ENERGY CONVERSION – NEWMAN
        (TR 1000-1115 PLUS LAB SECTIONS AT M 1230-0230, M 0230-0430, T
        0700-0900)
EECS 381 HYBRID SYSTEMS – BRANICKY (MW 0330-0445)
EECS 409 DISCRETE EVENT SYSTEMS – BRANICKY (MW 0330-0445)
EECS 466 COMPUTER GRAPHICS – CAVUSOGLU (TIME TBD, MW 3:30-4:45
        TENTATIVE)

INSTRUCTOR CHANGES:
EECS 500 COLLOQUIUM – GARVERICK
EECS 281 LOGIC DESIGN – EMELKO
EECS 301 DIGITAL LAB – SAAB
EECS 304 CONTROL ENGINEERING - CHANKONG
EECS 305 CONTROL ENGINEERING LAB – CHANKONG
EECS 398L SENIOR PROJECT - SREENATH
EECS 398N SENIOR PROJECT - SREENATH
EECS 399L SENIOR PROJECT - SREENATH
EECS 399M SENIOR PROJECT - SREENATH
EECS 399N SENIOR PROJECT - SREENATH
EECS 413 NONLINEAR SYSTEMS - LOPARO

TIME CHANGES:
EECS 346 ENGINEERING OPTIMIZATION – T 0600-0830 PM
EECS 354 DIGITAL COMMUNICATION - MWF 1030-1120
EECS 314 COMPUTER ARCHITECTURE – TIME AND INSTRUCTOR TBD

WAITING FOR COURSE ACTION FORMS
EECS 120 INTRODUCTION TO ECE – BUCHNER –TIME TBD
EECS 366 COMPUTER GRAPHICS – CAVUSOGLU – (TIME TBD — MW 3:30-4:45 TENTATIVE)
EECS 600 SYSTEM BIOLOGY – MESAROVIC

TO BE REVIEWED BY CURRICULUM COMMITTEE
EECS 350/450 MANUFACTURING SYSTEMS (TO BE DISCUSSED)
EECS 383/483 DIGITAL CONTROL & DATA ACQUISITION (TO BE DISCUSSED)

PROPOSED CHANGE: CHECK WITH MERAL
EECS 400T – GRADUATE TEACHING I – G. ZHANG
NOTE: CS STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 400T – GRADUATE TEACHING I – V. CHANKONG
NOTE: EE, CE AND SY STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 500T – GRADUATE TEACHING I – G. ZHANG
NOTE: CS STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 500T – GRADUATE TEACHING I – V. CHANKONG
NOTE: EE, CE AND SY STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 600T – GRADUATE TEACHING I – G. ZHANG
NOTE: CS STUDENTS SHOULD REGISTER FOR THIS CLASS
EECS 600T – GRADUATE TEACHING I – V. CHANKONG
NOTE: EE, CE AND SY STUDENTS SHOULD REGISTER FOR THIS CLASS

CWRU COURSE ACTION FORM   DOCKET # _____
(instructions on back)
College/School: Case School of Engineering
Department: Electrical Engineering and Computer Science

PROPOSED:
Course Code & No.: EECS 120
Course Title: Introduction to Electrical, Systems, and Computer Engineering

Credit Hours: _____   Classroom/Lab Hours per week: _____
Faculty Member. Marc Buchner
Prerequisites (Code & No.): Freshman standing
Corequisites (Code & No.): _____
Cross-list: _____
Gen. Edu. or Core Requirement-Area: _____
_____

Effective as of: Semester Spring_____   Year 2004_____
Course Offered: Every Year X_____   Alternating Years _____
         Fall _____   Spring X_____   Summer _____

Does this course replace any course that no longer will be offered?
Yes ☐ No ☒ If yes, identify the course(s) being terminated:
_____

Check the following as appropriate

☒ NEW COURSE

☐ DROP COURSE

CHANGE(S) TO EXISTING COURSE:
☐ Code/Number
☐ Title
☐ Credit Hour
☐ Classroom / Lab Hours
☐ Pre- or Corequisite (P or C)
☐ Bulletin Description
☐ Course Content

☐ ADD/ REMOVE CROSS-LIST

☐ Gen. Edu. *or* Core Requirement

G Grade or Pass/No Pass

☐ OTHER _____

[X] Attachments Included   ☐ All required consultations completed? (See Nos. 9-10 on reverse)

Title for transcripts and schedule of classes: (Limit of 30 characters/spaces.)

| I | N | T | R | O | | E | L | E | C | T | | S | Y | S | T | E | M | S | | C | O | M | P | U | T | E | R | | |

Bulletin Description: (Maximum length 1200 characters/spaces)

This course is an introduction to the fields of Electrical, Systems, and Computer Engineering through exposure to selected applications such as the digital generation of music, the processing of digital images, coding for of information, digital communication, and computer networks. Discussions of each field (Electrical, Systems, and Computer Engineering) using guest speakers as well as such topics as ethics and professionalism (as examined in the context of the course projects) will also be included. The course is intended to

CURRENT. (Complete only those items where a change is requested.)

Course Code & No.: _____   Credit Hours: _____   Classroom/Lab Hours per week: _____
Title: _____
Pre/Corequisites (Code & No.): _____
Cross-list: _____

Bulletin description: *If change requested, attach current and proposed on separate sheet with justification.*

SIGNATURES: *DATE*
Department Curriculum Committee Chair(s) / Program Directors _~~M.L.Branicky~~_
Department Chair(s) _~~Francis Merat~~_   9/12/03
College/School Curriculum Committee Chair _____
College/School Dean(s) _____
University Undergraduate Faculty Curriculum Committee Chair _____

Course Syllabus

EECS 120 – 3 credits

"Hands-on" Introduction to Electrical, Systems, and Computer Engineering

First Offering: Spring Semester, 2004

Instructor: Prof. Marc Buchner (marc.buchner@cwru.cwru)

Course Description: This course is an introduction to the fields of Electrical, Systems, and Computer Engineering through exposure to selected applications such as the digital generation of music, the processing of digital images, coding for of information, digital communication, and computer networks. Discussions of each field (Electrical, Systems, and Computer Engineering) using guest speakers as well as such topics as ethics and professionalism (as examined in the context of the course projects) will also be included. The course is intended to be taken as an open elective by freshmen who are interested in applying of fundamental mathematical and science concepts to the solution of interesting engineering problems. Students who are considering choosing a major in Electrical, Systems, or Computer Engineering (among other fields) can use this course to help in their decision making.

Course Rationale: The intent of this course is to interest freshman in the fields of Electrical, Systems, and Computer engineering by exposing them to the application of fundamental science and mathematics concepts to solving contemporary engineering problems – problems to which the students have already been exposed in the sense of being a "consumer" of the relevant technology. Thus the course curriculum encourages students to be excited about the application of their mathematical and science skills to the use of personal technology such as MP3, CD, DVD players; cell phones; their photography software (e.g. Photoshop), and handheld video devices. The approach that will be incorporated in the classroom and in assignments is that of open-ended problems. Students will be strongly encouraged to be innovative and explorative – to go beyond the textbook and the classroom lecture to develop their own ideas and solutions.

Prerequisites: Freshman standing, Pre-college mathematics through Algebra II, Geometry, and high school Physics.

Course Text: Engineering Our Digital Future (Prentice-Hall, 2004) by:

Geoffrey C. Orsak, *Southern Methodist University*,
Sally L. Wood, *Santa Clara University*,
Scott C. Douglas, *Southern Methodist University*,
David C. Munson, Jr., *University of Illinois*,
John R. Treichler, *Applied Signal Technology*,
Ravindra Athale, *DARPA, and*
Mark A. Yoder, *Rose-Hulman Institute of Technology*

CWRU COURSE ACTION FORM   DOCKET # _____
(instructions on back)
College/School: Case School of Engineering _____
Department: Electrical Engineering and Computer Science _____

PROPOSED:
Course Code & No.: EECS 366 _____
Course Title: Computer Graphics _____

Credit Hours: 3 _____ Classroom/Lab Hours per week: None _____
Faculty Member. Prof. M. Cenk Cavusoglu _____
Prerequisites (Code & No.): EECS 233 _____
Corequisites (Code & No.): None _____

Cross-list: None _____

Gen. Edu. or Core Requirement-Area: _____
_____

Effective as of: Semester Spring _____ Year 2004 _____
Course Offered: Every Year X _____   Alternating Years _____
                Fall _____   Spring X _____   Summer _____

Does this course replace any course that no longer will be offered?
Yes ☐ No ☒ If yes, identify the course(s) being terminated:
_____

☐ Attachments Included   ☐ All required consultations completed? (See Nos. 9-10 on reverse)

Title for transcripts and schedule of classes: (Limit of 30 characters/spaces.)

| C | o | m | p | u | t | e | r | | G | r | a | p | h | i | c | s | | | | | | | | | | | | | |

Bulletin Description: (Maximum length 1200 characters/spaces)

Theory and practice of computer graphics: Basic elements of a computer graphics rendering pipeline. Fundamentals of input and display devices. Geometrical transformations and their matrix representations. Homogeneous coordinates, projective and perspective transformations. Algorithms for clipping, hidden surface removal, and anti-aliasing. Rendering algorithms: introduction to local and global shading models, color, and lighting models for reflection, refraction, transparency. Real-time rendering methods and animation.

CURRENT. (Complete only those items where a change is requested.)

Course Code & No.: _____ Credit Hours: _____ Classroom/Lab Hours per week: _____
Title: _____
Pre/Corequisites (Code & No.): _____
Cross-list: _____

Bulletin description: *If change requested, attach current and proposed on separate sheet with justification.*

SIGNATURES: DATE
Department Curriculum Committee Chair(s) / Program Directors _MHBranicky_____
Department Chair(s) _____ F. Merat _____ 9/12/03 .
College/School Curriculum Committee Chair _____
College/School Dean(s) _____
University Undergraduate Faculty Curriculum Committee Chair _____

EECS 366

Computer Graphics

Basic elements of a computer graphics rendering pipeline. Fundamentals of input and display devices, scan conversion of geometric primitives. Geometrical transformations such as rotation, scaling, translation, and their matrix representations. Homogeneous coordinates, projective and perspective transformations. Algorithms for clipping, hidden surface removal, rasterization, and anti-aliasing. Rendering algorithms: introduction to local and global shading models, color, and lighting models for reflection, refraction, transparency. Real-time rendering methods and physical modeling for simulation.

Written assignments, weekly programming assignments using C/C++, OpenGL.

Prerequisites: EECS 233 (Introduction to Data Structures), or Permission of the Instructor
Recommended: C/C++ Programming Experience, Elementary Linear Algebra

EECS 366 Computer Graphics

Instructor:

M. Cenk Cavusoglu
Email: mcc14@po.cwru.edu
Office: 515A Glennan Bldg. *Phone:* 368-4479

Course Outline:

Lectures	Topic
1	Introduction
2	Raster concepts: scan conversion of points, lines and filled polygons
1	Anti-aliasing
3	Homogeneous coordinates, transformations, perspective projection
1	2D and 4D line and polygon clipping algorithms
2	Hidden surface removal algorithms
1	Introduction to shading concepts, local versus global illumination models, BRDF
2	Local shading models
2	Global shading I: Ray tracing
1	Global shading II: Radiosity method
1	Texture mapping
1	Anti-aliasing revisited
2	Environment mapping, bump mapping, geometric shadow algorithms
1	Volume rendering
1	Splines and geometric modeling
2	Physics based modeling

Grading (tentative):
EECS366: 45% Homeworks, 20% Midterm, 35% Final

Textbook
Computer Graphics, C Version *(2nd Edition) (will use 3rd Edition (OpenGL Version) if available in time for the course)*
Donald Hearn, M. Pauline Baker
Prentice Hall; ISBN: 0135309247 *(for 2nd edition)*

Recommended Reading and Other References
1. **Computer Graphics: Principles and Practice in C** *(2nd Edition),* James D. Foley, Andries van Dam, Steven K. Feiner, John F. Hughes, Addison-Wesley Pub Co; ISBN: 0201848406
2. **3D Computer Graphics** *(3rd Edition),* by Alan H. Watt, Addison-Wesley Pub Co; ISBN: 0201398559

SEMESTER: FALL (SPRING) SUMMER YEAR: 2004

DEPARTMENT: EECS 600 PAGE ___ OF ___

SUBJECT/COURSE: SYSTEMS BIOLOGY

CREDIT HOURS: 3

ENROLLMENT LIMIT: NONE

CROSS LISTINGS(S): _____ _____ _____

PERMIT REQUIRED? YES/(NO)(Circle one)

(Scheduling department must coordinate offerings with cross-listing department(s))

DAYS1: TUESDAYS TIME1: 5:00 TO 7:00 LOCATION: _____

DAYS2: __ __ __ __ __ __ __ TIME2: _____ TO _____ LOCATION: _____

DAYS3: __ __ __ __ __ __ __ TIME3: _____ TO _____ LOCATION: _____

INSTRUCTOR1: MIHAJLO MESAROVIC

INSTRUCTOR2: JOE NADEAU

INSTRUCTOR3: SREE SREENATH

___9/15/03___
Date

___Francis Merat___
Scheduling Officer