22. Social Psychology of Substance Abuse  
3 hours lecture  
Acceptable for credit: CSU  
Substance abuse in the context of culture and life styles, mores, needs, attitudes, and values of substance abusers as reflected in addiction and in vulnerability to addiction. 2104.40

24. +Human Development  
3 hours lecture  
Acceptable for credit: CSU  
Survey of development from childhood through old age: Problems and challenges of individual development considered as a psychological, social, intellectual and physical process, especially as they are related to substance abuse. 2104.00

40A-C. Community Social Services Field Experience  
2 hours lecture, 8 hours field experience weekly  
Acceptable for credit: CSU  
Course study under this section may be repeated two times.  
Field work under supervision in community organizations and projects: Working with people in human services settings, combined with participation in weekly seminar to integrate academic learning with the field experience. 2104.00

41. +Substance Abuse and the Law  
3 hours lecture  
Acceptable for credit: CSU  
Overview of the civil and criminal justice system with particular reference to knowledge needed by service workers and police officers who deal with legal problems experienced by substance abusers. 2104.00

42. +Counseling Skills and Substance Abuse  
3 hours lecture  
Acceptable for credit: CSU  
Investigation of counseling skills needed by those working with substance abusers in a group/resident setting and in a social model program. 2104.40

43A. +Introduction to Counseling Skills for Paraprofessionals I  
3 hours lecture  
Acceptable for credit: CSU  
Introduction to counseling skills for paraprofessionals: Emphasis on the experiential process of interpersonal communication as well as comprehension of the theoretical elements of the counseling process and behavior. 2104.00

43B. +Introduction to Counseling Skills for Paraprofessionals II  
3 hours lecture  
Recommended preparation: Coser 43A or (Psych 48NA)  
Acceptable for credit: CSU  
Continuing introduction to counseling skills for paraprofessionals: Emphasis on the experiential process of interpersonal communication as well as comprehension of the theoretical elements of the counseling process and behavior to include counselor-client relationships, collaborative problem-solving process, major theories of counseling, counseling and interview techniques, and how to help clients clarify goals and develop strategies to achieve their goals. 2104.00

44. +Introduction to Case Management for Paraprofessionals  
3 hours lecture  
Acceptable for credit: CSU  
Basic concepts and skills of case management for paraprofessionals: Assessment, financial concerns, planning and linkage with community agencies, service monitoring, legal and ethical considerations, consultation and referral strategies, careers in case management, and personal characteristics of professional case managers. 2104.00

45. +Diversity in Human Services  
3 hours lecture  
Acceptable for credit: CSU  
Study of the values, problems, issues and specific needs of diverse groups for the human services paraprofessional: Issues of aging, gender roles, ethnicity, socio-economic status, disability, and sexual orientation; and insight, knowledge and skills necessary to work within the human services field. AA/AS area 2; CSU area D, E 2104.00

48NA-TZ. +Selected Topics in Community Social Services  
.5-9 units  
See Section on Selected Topics. 2104.00

49. +Independent Study in Community Social Services  
.5-5 units  
Course study under this section may be repeated three times.  
See Section on Independent Study. 2104.00

248NA-TZ. +Selected Topics in Community Social Services  
.5-9 units  
See Section on Selected Topics. 2104.00
COMPUTER INFORMATION SYSTEMS

The Computer Information Systems Department offers three degree/certificate programs designed to train students in computer and related technologies. These programs, Computer Networks and Communications, Microcomputer Software Specialist, and Software Development, are described below. The AS degree will be awarded in each program upon satisfactory completion of the Major course requirements and the General Education requirements. A Certificate will be awarded in each upon satisfactory completion of the major course requirements.

Under a full-time course load, it is possible to complete any one of the three CIS certificate programs within two semesters. Students wishing to earn an Associate degree (usually four semesters) in one of these programs must arrange to see a counselor who can assist in formulating a plan of study that would also include courses meeting the college’s General Education requirements.

COMPUTER NETWORKS AND COMMUNICATIONS

Recommended for students who are interested in both hardware and software technologies in data communications, and in local area network design, management, and administration.

Degree Major/Certificate Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 5</td>
<td>Introduction to Computer Science</td>
<td>4-5</td>
</tr>
<tr>
<td>CIS 3</td>
<td>Computer-Related Mathematics and Applications</td>
<td>4</td>
</tr>
<tr>
<td>CIS 25</td>
<td>Object-Oriented Programming Using C++</td>
<td>4</td>
</tr>
<tr>
<td>CIS 26</td>
<td>C Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 30</td>
<td>Data Communications and Networks</td>
<td>4</td>
</tr>
<tr>
<td>CIS 31</td>
<td>Introduction to Network Administration</td>
<td>4</td>
</tr>
<tr>
<td>CIS 39A</td>
<td>UNIX Operating System</td>
<td>4</td>
</tr>
<tr>
<td>CIS 209</td>
<td>Introduction to Windows</td>
<td>1</td>
</tr>
<tr>
<td>CIS 233</td>
<td>Introduction to the Internet</td>
<td>2</td>
</tr>
<tr>
<td>Plus:</td>
<td>One Introductory Programming Course (CIS 6 or 10 or 12 or 24, or other courses subject to departmental approval)</td>
<td>3-5</td>
</tr>
<tr>
<td>Total required units:</td>
<td>30-33</td>
<td></td>
</tr>
</tbody>
</table>

INTERNET PROGRAMMING

This program prepares students for entry-level positions in Internet programming. Recipients of this certificate will find themselves developing interactive web sites, whether as front-end site solutions or back-end data gathering and manipulation; or developing stand-alone, custom applications with Internet functionality.

Certificate of Achievement Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 36</td>
<td>Java Programming Language</td>
<td>4</td>
</tr>
<tr>
<td>CIS 64</td>
<td>Internet Programming in JavaScript</td>
<td>2</td>
</tr>
<tr>
<td>CIS 65</td>
<td>CGI Programming</td>
<td>2</td>
</tr>
<tr>
<td>CIS 66</td>
<td>XML Documents and Applications</td>
<td>2</td>
</tr>
<tr>
<td>CIS 234A</td>
<td>World Wide Web Publishing I</td>
<td>2</td>
</tr>
<tr>
<td>CIS 234B</td>
<td>World Wide Web Publishing II</td>
<td>2</td>
</tr>
<tr>
<td>Total required units:</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

MICROCOMPUTER SOFTWARE SPECIALIST

Recommended for students who are oriented towards the use of computer applications in business, but who do not necessarily wish to focus on computer programming as a career objective.

Degree Major/Certificate Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 5</td>
<td>Introduction to Computer Science</td>
<td>4-5</td>
</tr>
<tr>
<td>CIS 35</td>
<td>Microcomputer Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 40</td>
<td>Introduction to Data Base Management</td>
<td>4</td>
</tr>
<tr>
<td>CIS 42</td>
<td>Introduction to Spreadsheet Applications</td>
<td>4</td>
</tr>
<tr>
<td>CIS 44</td>
<td>Introduction to Desktop Publishing on IBM PC</td>
<td>4</td>
</tr>
<tr>
<td>Plus:</td>
<td>9 units in courses from the following topics:</td>
<td></td>
</tr>
<tr>
<td>Advanced Applications (CIS 31 or 39 or 41, or other courses subject to departmental approval)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Networks and Communications (CIS 30 or 31 or 233, or other courses subject to departmental approval)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introductory Programming (CIS 6 or 10 or 12 or 24, or other courses subject to departmental approval)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Total required units:</td>
<td>29-30</td>
<td></td>
</tr>
</tbody>
</table>

PC APPLICATIONS HELP DESK SPECIALIST

Certificate of Achievement Requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 5</td>
<td>Human Relations in Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 35</td>
<td>Microcomputer Operating Systems</td>
<td>4</td>
</tr>
<tr>
<td>CIS 201</td>
<td>Introduction to Computer Hardware</td>
<td>4</td>
</tr>
<tr>
<td>CIS 239</td>
<td>Help Desk Tools and Techniques</td>
<td>2</td>
</tr>
<tr>
<td>Total required units:</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>
SOFTWARE DEVELOPMENT

Recommended for students who are focussed on computer programming as a career, as well as those who intend to transfer into a four-year institution's bachelor's-degree program in Computer Science.

**Degree Major/Certificate Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>Prerequisite(s)</th>
<th>Acceptable for credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information</td>
<td>4</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 5</td>
<td>Introduction to Computer Science (5)</td>
<td>4-5</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 3</td>
<td>Computer-Related Mathematics and Applications</td>
<td>4</td>
<td>Math 203 or 211D or (204C)</td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 20</td>
<td>Microcomputer Assembly Language</td>
<td>4</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 22</td>
<td>Advanced Programming in BASIC (3)</td>
<td>4</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 27</td>
<td>Data Structures and Algorithms in C (4)</td>
<td>4</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 37</td>
<td>Advanced Microcomputer Programming (4)</td>
<td>4</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 41</td>
<td>Database Programming (4)</td>
<td>3-4</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 26</td>
<td>C Programming (4)</td>
<td>4</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 25</td>
<td>Object-Oriented Programming Using C++ (4)</td>
<td>4</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>Plus:</td>
<td>One Introductory Programming Course (CIS 6 or 10 or 12 or 24, or other courses subject to departmental approval)</td>
<td>3-5</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>And:</td>
<td>Any CIS course</td>
<td>3</td>
<td></td>
<td>CSU, UC</td>
</tr>
</tbody>
</table>

Total required units: 25-29

WEB PAGE AUTHORING

**Certificate of Achievement Requirements:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>Prerequisite(s)</th>
<th>Acceptable for credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 233</td>
<td>Introduction to the Internet</td>
<td>2</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 234A</td>
<td>World Wide Web Publishing I</td>
<td>2</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 234B</td>
<td>World Wide Web Publishing II</td>
<td>2</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 234C</td>
<td>Web Creation with Dreamweaver</td>
<td>2</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 242A</td>
<td>Digital Animation with Flash</td>
<td>2</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 242B</td>
<td>Digital Video</td>
<td>2</td>
<td></td>
<td>CSU, UC</td>
</tr>
<tr>
<td>CIS 242C</td>
<td>Digital Audio Production I</td>
<td>2</td>
<td></td>
<td>CSU, UC</td>
</tr>
</tbody>
</table>

Total required units: 14

1. +Introduction to Computer Information Systems  4 units

3 hours lecture, 3 hours laboratory
Acceptable for credit: CSU, UC

General nature of computer hardware, software and systems: Hands-on applications include introduction to word processing, spreadsheet, database management and presentation software, and a brief introduction to web browsing and email.

AA/AS area 4c  0701.00

3. +Computer-Related Mathematics and Applications  4 units

3 hours lecture, 3 hours laboratory
Prerequisite: Math 203 or 211D or (204C)
Acceptable for credit: CSU, UC

Presents mathematical concepts in the context of computer applications: Algorithms and analysis of algorithms, logic and mathematical proofs (contradiction and induction), sets, relations and functions, combinatorics, graph theory, Boolean algebra, and discrete probability.

AA/AS area 4c

5. +Introduction to Computer Science  5 units

4 hours lecture, 3 hours laboratory
Acceptable for credit: CSU, UC

[CIS 1+CIS 5: CAN CSCI 2]

Architecture of digital computers, design of algorithms for solving various problems, and basic skills in computer programming.

AA/AS area 4c

6. +Introduction to Computer Programming  5 units

4 hours lecture, 3 hours laboratory
Recommended preparation: CIS 5
Acceptable for credit: CSU, UC

Introduction to computer programming: Algorithm design, flow charting, debugging, elements of good programming style. Course may be instructed in any programming language.

AA/AS area 4c  0704.00

10. +Introduction to Programming in BASIC  4 units

3 hours lecture, 4 hours laboratory
Acceptable for credit: CSU, UC

Beginning course in structured programming using the BASIC language: Input/output operations, use of files, computational operations, conditional testing, looping and arrays, using PC BASIC.

AA/AS area 4c  0704.00

20. +Microcomputer Assembly Language  4 units

3 hours lecture, 3 hours laboratory
Recommended preparation: CIS 3 or 6 or 12 or 26
Acceptable for credit: CSU, UC

[CAN CSCI 110]

Introduction to IBM PC assembly language: Input/output operations, use of files, program flow controls, interaction with DOS via interrupts, pointers and arrays, strings and structured programming, and related applications.

AA/AS area 4c  0704.00
25. +Object-Oriented Programming Using C++ 4 units
3 hours lecture, 3 hours laboratory
Recommended preparation: CIS 6 or 10 or 12 or 24 or 26
Acceptable for credit: CSU, UC
Object-oriented methods of software development: Includes the design and implementation of objects, class construction and destruction, encapsulation, inheritance, and polymorphism. AA/AS area 4c 0704.00

26. +C Programming 4 units
3 hours lecture, 3 hours laboratory
Recommended preparation: CIS 3, and 6 or 12 or 20 or 24
Acceptable for credit: CSU, UC
Fundamental program and data structures which comprise C programs: Functions, control flow, data types, storage classes, arrays, pointers, structures, and input/output. AA/AS area 4c

27. +Data Structures and Algorithms in C 4 units
3 hours lecture, 3 hours laboratory
Prerequisite: CIS 26
Acceptable for credit: CSU, UC
Use of abstract forms of data in the C programming language: Concepts, implementation, and applicability of different forms of data to various programming problems. AA/AS area 4c 0704.00

30. +Data Communications and Networks 4 units
3 hours lecture, 3 hours laboratory
Recommended preparation: CIS 1 or 5
Acceptable for credit: CSU
Data communications and networks: Serial communications, modems, the phone network, file transfer, protocols, X-modem, Z-modem; Kermit physical networks, cabling, Arcnet, Ethernet, Token ring, network operating systems, Novell, other networks, servers, work stations, security, network administration, and alternatives to networks. AA/AS area 4c

31. +Introduction to Network Administration 4 units
3 hours lecture, 3 hours laboratory
Recommended preparation: CIS 35 or 210
Acceptable for credit: CSU
Introduction to network administration: Covers the introductory skills, knowledge and attributes necessary to work with and administer local area networks. AA/AS area 4c

35. +Microcomputer Operating Systems 4 units
3 hours lecture, 3 hours laboratory
Recommended preparation: CIS 1 or 5
Acceptable for credit: CSU
Microcomputer operating systems: Selection, use and programming with operating systems, concentrating on the personal computer. AA/AS area 4c

36. +Java Programming Language 4 units
3 hours lecture, 3 hours laboratory
Prerequisite: CIS 25 or 26 or 215
Recommended preparation: CIS 233 or 237
Acceptable for credit: CSU, UC
Introduction to object-oriented program design using Java: Overview of the programming language including the development of applets for web pages and stand-alone applications. AA/AS area 4c

37. +Advanced Microcomputer Programming 4 units
3 hours lecture, 4 hours laboratory
Prerequisite: CIS 20 and 26
Acceptable for credit: CSU, UC
Introduction to advanced programming techniques and systems programming. AA/AS area 4c

39A. +UNIX Operating System 4 units
3 hours lecture, 3 hours laboratory
Prerequisite: CIS 5
Acceptable for credit: CSU
The UNIX operating system: Emphasis on file system, e-mail, shell commands and programming, editing, programming tools, administrative structures, and utilities. AA/AS area 4c

40. +Introduction to Data Base Management 4 units
3 hours lecture, 3 hours laboratory
Recommended preparation: CIS 1 or 5
Acceptable for credit: CSU
Creation, access, and modification of databases: Working interactively with applications and concepts of programming, menu-driven systems, differences between original version and program upgrades. AA/AS area 4c
41. +Database Programming  
3 hours lecture, 3 hours laboratory  
4 units  
Prerequisite: CIS 40  
Acceptable for credit: CSU  
Programming in database management systems (e.g., dBASE, Paradox, Foxpro): Database design, programming structures, strategies and techniques. 0703.00  
AA/AS area 4c

42. +Introduction to Spreadsheet Applications  
3 hours lecture, 3 hours laboratory  
4 units  
Recommended preparation: CIS 1 or 5 or 200  
Course is equivalent to CIS 42A and 42B. Not open for credit to students who have completed or are currently enrolled in CIS 42A and/or 42B.  
Acceptable for credit: CSU  
Principles of electronic spreadsheets using features available with currently popular spreadsheet software: Worksheet creation and formatting; entering of data, formulas, and functions; editing and printing; basic charting; basic database functions of sorting and querying; financial functions; logical functions; forecasting trends; lookup tables; "pivot tables"; graphic design for financial statements; statistical operations (regression analysis); macro programming. 0703.00  
AA/AS area 4c

48NA-TZ. +Selected Topics in Computer Information Systems  
.5-9 units  
See section on Selected Topics. 0703.00  
AA/AS area 4c (if course is one unit or more)

49. +Independent Study in Computer Information Systems  
.5-5 units  
Course study under this section may be repeated three times.  
See section on Independent Study. 0703.00

64. +Internet Programming in JavaScript  
1.5 hours lecture, 1.5 hours laboratory  
2 units  
Prerequisite: CIS 16 or 26, and 234A  
Recommended preparation: CIS 36  
Acceptable for credit: CSU  
Development of web-based interactive programs using JavaScript. 0703.00  
AA/AS area 4c

65. +CGI Programming  
1.5 hours lecture, 1.5 hours laboratory  
2 units  
Prerequisite: CIS 16 or 26, and 234A  
Recommended preparation: CIS 39A and 234B  
Acceptable for credit: CSU  
Implementation of CGI applications in PERL and C, with an emphasis on form handlers, shopping carts, search pages and databases access. 0704.00  
AA/AS area 4c

66. +XML Documents and Applications  
2 units  
1.5 hours lecture, 1.5 hours laboratory  
Recommended preparation: CIS 234A  
Acceptable for credit: CSU  
Development of documents and applications using the eXtensible Markup Language (XML), a Web document-authoring meta-language that is used to separate data from its visual representation; use of XSL for data translation. 0703.00  
AA/AS area 4c

201. +Introduction to Computer Hardware  
4 units  
3 hours lecture, 3 hours laboratory  
Course is equivalent to CIS 201A and 201B. Not open for credit to students who have completed or are currently enrolled in CIS 201A and/or 201B.  
Introduction to computer hardware: Maintaining and servicing computer equipment, fundamental concepts and architecture, major computer subsystems and peripheral devices, common computer problems, troubleshooting techniques, repair procedures and preventive maintenance; examines traditional, current and emerging computer technologies. 0703.00  
AA/AS area 4c

205. +Computer Literacy  
1 unit  
1.5 hours lecture, 1.5 hours laboratory for 9 weeks  
An introduction to computers and information technology for people with no background in nor knowledge of computers. Students may need to purchase supplies. 0703.00  
AA/AS area 4c

209. +Introduction to Windows  
1 unit  
1.5 hours lecture, 1.5 hours laboratory for 9 weeks  
Recommended preparation: CIS 205  
An introduction to graphical user interfaces using Microsoft Windows. 0703.00  
AA/AS area 4c
233. +Introduction to the Internet  2 units
1.5 hours lecture, 1.5 hours laboratory
Recommended preparation: CIS 205
Using the Internet for access to information resources: Access methods, resources, and how to use them. 0703.00
AA/AS area 4c

234A. +World Wide Web Publishing I  2 units
1.5 hours lecture, 1.5 hours laboratory
Recommended preparation: CIS 233 and Grart 12
Creating and publishing Web pages over the Internet using the Hypertext Markup Language (HTML). 0703.00
AA/AS area 4c

234B. +World Wide Web Publishing II  2 units
1.5 hours lecture, 1.5 hours laboratory
Prerequisite: CIS 233 and 234A
Recommended preparation: Grart 12
Continuation of CIS 234A with emphasis on: Advanced HTML and layout techniques, client-side image maps, CGI scripting, introduction to Cascading style sheets and dynamic scripting. AA/AS area 4c 0703.00

234C. +Web Creation with Dreamweaver  2 units
1.5 hours lecture, 1.5 hours laboratory
Prerequisite: CIS 234B
Recommended preparation: CIS 1
Creation and management of web sites and pages using Macromedia Dreamweaver: Authoring of web sites which incorporate DHTML, JavaScript through “behaviors,” rollovers, and techniques for managing large-scale web sites. AA/AS area 4c 0703.00

239. +Help Desk Tools and Techniques  2 units
1.5 hours lecture, 1.5 hours laboratory
Help desk tools and techniques: Troubleshooting problems on computer systems, both networked and stand-alone; customer service skills for success; use of help desk software. AA/AS area 4c 0701.00

240. Computer Literacy in Health Science  1 unit
13.5 term hours lecture, 18 term hours laboratory; or 1.5 hours lecture, 2 hours laboratory for 9 weeks
Introduction to the computer, its uses, and its influence on the health care setting: Hands-on use of software for patient record-keeping, word processing, spreadsheets, and other hospital inter-departmental communications networks. 0703.00
AA/AS area 4c

242A. +Digital Animation with Flash  2 units
1.5 hours lecture, 1.5 hours laboratory
Prerequisite: CIS 234A
Recommended preparation: CIS 1
Creation of digital animation and interactive vector graphics for the production of animation and interactive content for the Internet and other applications using Macromedia Flash. AA/AS area 4c 0703.00

242B. +Digital Video  2 units
1.5 hours lecture, 1.5 hours laboratory
Prerequisite: CIS 234A
Recommended preparation: CIS 1
General overview of digital video editing techniques, digital video formats and compression schemes for distribution of digital video via CDs and over the web: Includes hands-on experience with creating short digital videos for the web, presentations, and multimedia applications distributed via CD-ROM. AA/AS area 4c 0703.00

242C. +Digital Audio Production I  2 units
1.5 hours lecture, 1.5 hours laboratory
Corequisite: CIS 1 or 5 or 205
Creation of digital audio for radio, music, internet, film and video: Digital audio theory, recording, editing, mixing, and mastering of sound using Pro Tools Digital Audio Workstation. AA/AS area 4c 0703.00

248NA-TZ. +Selected Topics in Computer Information Systems .5-9 units
See section on Selected Topics. 0703.00
AA/AS area 4c (if course is one unit or more)

250A-D. +Computer Literacy Essentials .5 unit each module
.25 hours lecture, .75 hours laboratory each module
Open-entry/open-exit, modular course
Non-degree applicable
Course study under this section may be repeated three times.
Essentials of computer literacy:
250A: Hardware, software (Windows operating system); computer input, output, storage and interface; keyboard, window elements, help command, and dialogue boxes.
250B: Menus, common user interface, drives and directories, backing up files, Internet browser and searches.
250C: Internet and email, typing and word processing (using Microsoft Word), faxing, making programs work together, paint programs.
250D: Tables, mail merge, Windows Explorer, network neighborhood, computer maintenance, styles, graphics. 0701.00
**COOPERATIVE EDUCATION**

Duplicate credit will not be granted for concurrent enrollment in General Work Experience and Occupational Work Experience Education. A maximum of 16 units can be granted for occupational work experience or a combination of general and occupational work experience education. The student’s plan of work and study must have the approval of the college work experience supervisor. Work experience, in conjunction with a program of instruction, makes it possible for a student to obtain college credit for paid or volunteer experience.

**450. +General Work Experience**  
**1-3 units**  
*Hours to be arranged*  
Corequisite: During regular semesters, students must enroll in a minimum of seven units including Cooperative Work Experience Education. During summer sessions, students must enroll in one other class in addition to Cooperative Work Experience Education.  
Acceptable for credit: CSU  
Course study under this section may be repeated three times.  
Supervised employment to assist in acquiring desirable work habits and attitudes, increase educational motivation, and develop improved human relations skills. Employment need not relate to educational or occupational goals.  

**452A-476F. Occupational Work Experience**  
**1-4 units each course**  
*Hours to be arranged*  
Corequisite: During regular semesters, students must enroll in a minimum of seven units including Cooperative Work Experience Education. During summer sessions, students must enroll in one other class in addition to Cooperative Work Experience Education.  
Acceptable for credit: CSU  
Course study under this section may be repeated three times.  
Supervised employment providing opportunities to become a productive, responsible individual and to extend learning in a chosen occupational field.
ECONOMICS

The major in Economics is designed to prepare students for transfer to four-year institutions; to enter the business world with knowledge of economic trends and conditions; or to provide training for such positions as market analyst, sales analyst, or stockbroker. The AA degree in Economics will be awarded upon satisfactory completion of the Major course requirements and the General Education requirements.

Degree Major Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 1A</td>
<td>Financial Accounting</td>
<td>4</td>
<td>4</td>
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<tr>
<td>BUS 10</td>
<td>Introduction to Business</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Principles of Economics (Macro-Economics)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2</td>
<td>Principles of Economics (Micro-Economics)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>ECON 10</td>
<td>Economic History of the United States</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 5</td>
<td>Economic Geography</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>MATH 13</td>
<td>Introduction to Statistics</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Total required units: 27

Recommended:

- BUS 2 Introduction to Business Law (3)
- BUS 5 Human Relations (3)

1. Principles of Economics (Macro-Economics)  
3 hours lecture  
Econ 1 is not a prerequisite to Econ 2  
Not open for credit to students who have completed or are currently enrolled in Econ 11.  
Acceptable for credit: CSU, UC  
[CAN Econ 2]  
Introductory economic concepts: Measurements of national income and production; causes of inflation, recession, and depression; money and banking; government monetary and fiscal (spending and taxation) policy; stabilization techniques; economic growth; history of economic thought and philosophy.  
AA/AS area 2; CSU area D; IGETC area 4  
2204.00

2. Principles of Economics (Micro-Economics)  
3 hours lecture  
Acceptable for credit: CSU, UC  
[CAN Econ 4]  
Forms of business organization, theory of the firm within competitive and noncompetitive markets, distribution of income, poverty, labor issues, and agriculture.  
AA/AS area 2; CSU area D; IGETC area 4  
2204.00

DANCE

48NA-TZ. +Selected Topics in Dance .5-5 units  
See section on Selected Topics.  
1008.00

248NA-TZ. +Selected Topics in Dance .5-5 units  
See section on Selected Topics.  
1008.00
10. Economic History of the United States

3 units

3 hours lecture

Acceptable for credit: CSU, UC

Economic development of the United States: Major economic issues, and institutions and their impact on modern American society.

AA/AS area 2; CSU area D; IGETC area 4

11. Business Economics

3 units

3 hours lecture

Not open for credit to students who have completed or are currently enrolled in Econ 1.

Acceptable for credit: CSU

Basic operations of the American economic system from the point of view of the consumer and the business person: Nature of the mixed economy, fiscal and monetary policy, employment, inflation, economic stability, market structure, price system, government economic policies, international issues, and comparative economic systems.

AA/AS area 2; CSU area D

48NA-TZ. Selected Topics in Economics

.5-5 units

See section on Selected Topics.

248NA-TZ. Selected Topics in Education

.5-9 units

See section on Selected Topics.

348NA-TZ. Selected Topics in Education

.5-9 units

Non-degree applicable

See section on Selected Topics.

EMERGENCY MEDICAL TECHNICIAN

A Certificate of Skills in Emergency Medical Technician I will be awarded upon satisfactory completion of EMT 210.

210. +Emergency Medical Technician-Basic

5 units

4 hours lecture, 3 hours laboratory

Prerequisite: Hltd 9 or Standard First Aid, and Hltd 11 or CPR/BLS, and health clearances: Recent TB skin test (within 9 months of beginning of class), and hepatitis B vaccine (completion of two of three-shot series by beginning of class).

Meets California State Department of Health criteria.

Basic training course covering all techniques of emergency medical care considered within the responsibilities of the Emergency Medical Technician as well as all operational aspects of the job: Emphasis on the development of student skills in the recognition of illness and injuries, and proper procedures of emergency care.

EDUCATION

1. +Introduction to the Field of Education

3 units

3 hours lecture

Acceptable for credit: CSU, UC (pending)

Historical and sociological analysis of the education system and careers in teaching: Study of principles of effective instructional models, with emphasis on student-centered and culturally-relevant methods; research of resources for curriculum and instruction; and observation of teaching practices in local schools.

AA/AS area 2


**EMERGENCY MEDICAL TECHNICIAN**

Recertification  
2 units

1.5 hours lecture, 1.5 hours laboratory  
**Prerequisite:** EMT 210 or EMT certification that is current or that has been expired no more than four years; and HIled 11 or current CPR certification  
**Non-degree applicable**  
Course study under this section may be repeated as needed. Recertification through review of didactic and practical techniques required of the Emergency Medical Technician: Examination of all aspects of the job including roles and responsibilities of the Emergency Medical Technician, medical-legal aspects, human systems and basic anatomy, types of emergencies encountered, extrication and rescue of patients, and documentation and communications.  
1250.00

**ENGINEERING**

17. Introduction to Electrical Engineering  
3 units  
3 hours lecture  
**Prerequisite:** Phys 4B or (quarter-system Phys 4C at COA)  
**Prerequisite or corequisite:** Math 3F or 3D or (4F)  
**Acceptable for credit:** CSU, UC  
Basic circuit elements, modeling, critical laws and network theorems. Techniques for analysis of lumped, linear circuits including operational amplifiers. Analysis of AC circuits and power; semiconductor diodes and rectifier design.  
0901.00

35. Engineering Mechanics-Statics  
3 units  
3 hours lecture  
**Prerequisite:** Math 3C, and Phys 4A or (quarter-system Phys 4B at COA)  
**Acceptable for credit:** CSU, UC  
Vectorial treatment of principles of the statics of particles and rigid bodies: Applications to problem of two-dimensional and three-dimensional systems; centroids and moments of inertia, structures, friction, and principles of virtual work.  
0901.00

48NA-TZ. +Selected Topics in Engineering  
.5-5 units  
See section on Selected Topics.  
0901.00

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**ENGLISH**

The **AA degree in Language Arts** will be awarded upon satisfactory completion of the Major course requirements and the General Education requirements.

**Degree Major Requirements:**

Completion of at least 18 units in English and Speech courses selected from the following list:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>ENGL 10A-B</td>
<td>Creative Writing</td>
<td>3</td>
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<tr>
<td>ENGL 17A-B</td>
<td>Shakespeare</td>
<td>3</td>
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<tr>
<td>ENGL 26</td>
<td>Survey of the Bible as Literature</td>
<td>3</td>
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<tr>
<td>ENGL 30A-B</td>
<td>Introduction to American Literature</td>
<td>3</td>
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<tr>
<td>ENGL 32A-B</td>
<td>Contemporary Women Writers</td>
<td>3</td>
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<tr>
<td>ENGL 38</td>
<td>Lift Every Voice: Ethnicity/Gender/Class in the United States</td>
<td>3</td>
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<tr>
<td>ENGL 40</td>
<td>Jewish-American Writers</td>
<td>3</td>
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<tr>
<td>ENGL 43</td>
<td>Introduction to the Study of Poetry</td>
<td>3</td>
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<tr>
<td>ENGL 44A-B</td>
<td>Masterpieces of World Literature</td>
<td>3</td>
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<tr>
<td>ENGL 46A-B</td>
<td>Survey of English Literature</td>
<td>3</td>
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<tr>
<td>SPCH 4</td>
<td>The Dynamics of Group Discussion</td>
<td>3</td>
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<tr>
<td>SPCH 15B</td>
<td>Voice and Diction</td>
<td>3</td>
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<td>SPCH 20</td>
<td>Interpersonal Communication Skills</td>
<td>3</td>
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<td>SPCH 45</td>
<td>Public Speaking</td>
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Total required units: 18

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
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<tbody>
<tr>
<td>ENGL 1A-B</td>
<td>Composition and Reading</td>
<td>4</td>
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<td></td>
<td>4-4 units</td>
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<td></td>
<td>4 hours lecture</td>
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<td></td>
<td><strong>Prerequisite for Engl 1A:</strong> Engl 201B or ESL 21B or appropriate placement through multiple-measures assessment</td>
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<td><strong>Prerequisite for Engl 1B:</strong> Engl 1A</td>
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<td><strong>Acceptable for credit:</strong> CSU, UC</td>
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<td>[Engl 1A: CAN Engl 2], [Engl 1B: CAN Engl 4]</td>
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<td>[Engl 1A+Engl 1B: CAN Engl Seq A]</td>
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</table>

1A: Reading and writing of expository prose: Critical thinking, identifying logical fallacies, and reasoning inductively and deductively.  
AA/AS area 4a, 4d; CSU area A2; IGETC area 1A  
1B: Continued expository writing based on careful reading of selected plays, poems, and novels.  
1501.00  
AA/AS area 3, 4a, 4d; CSU area C2; IGETC area 3

5. Critical Thinking in Reading and Writing  
3 units  
3 hours lecture  
**Prerequisite:** Engl 1A  
**Acceptable for credit:** CSU, UC  
Development of ability to analyze, criticize, and advocate ideas: Relationship of language to logic, induction and deduction, facts, inferences, judgments, and formal and informal fallacies of language and thought. Instructs in writing about issues of critical thinking to develop both thinking and writing skills.  
AA/AS area 4a, 4d; CSU area A3; IGETC area 1B  
1501.00
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Lecture Hours</th>
<th>Prerequisites</th>
<th>Acceptable for credit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10A-B</td>
<td>Creative Writing</td>
<td>3-3</td>
<td>3</td>
<td>Prerequisite for Engl 10A and 10B: Engl 1A</td>
<td>CSU, UC</td>
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<td>Engl 10A is not prerequisite to Engl 10B</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td>[Engl 10A: CAN Engl 6]</td>
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<td></td>
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<td></td>
<td>Writing fiction, poetry, and drama, and careful analysis of the techniques used by established writers.</td>
<td>1507.00</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<tr>
<td>17A-B</td>
<td>+Shakespeare</td>
<td>3-3</td>
<td>3</td>
<td>Prerequisite for Engl 17A and 17B: Engl 1A</td>
<td>CSU, UC</td>
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<td>Engl 17A is not prerequisite to Engl 17B</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td>Study of selected works of Shakespeare.</td>
<td>1503.00</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td>IGETC area 3</td>
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<tr>
<td>26.</td>
<td>Survey of the Bible as Literature</td>
<td>3</td>
<td>3</td>
<td>Prerequisite: Engl 1A</td>
<td>CSU, UC</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td>Close reading and discussion of the Old Testament, New Testament, and Apocrypha with emphasis on literary forms, philosophical ideas, literary themes, and symbolism; nonsectarian.</td>
<td>1503.00</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td>IGETC area 3</td>
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<tr>
<td>30A-B</td>
<td>+Introduction to American Literature</td>
<td>3-3</td>
<td>3</td>
<td>Prerequisite for Engl 30A and 30B: Engl 1A</td>
<td>CSU, UC</td>
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<td>Engl 30A is not prerequisite to Engl 30B</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td>[Engl 30A: CAN Engl 14], [Engl 30B: CAN Engl 16]</td>
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<td>[Engl 30A+Engl 30B: CAN Engl Seq C]</td>
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<td></td>
<td>30A: Survey of American literature from pre-colonial beginnings to Walt Whitman</td>
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<td>30B: American romanticism to literature of the 20th century.</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td>IGETC area 3</td>
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<tr>
<td>32A-B</td>
<td>+Contemporary Women Writers</td>
<td>3-3</td>
<td>3</td>
<td>Prerequisite for Engl 32A and 32B: Engl 1A</td>
<td>CSU, UC</td>
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<td>Engl 32A is not prerequisite to Engl 32B</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td>Survey of contemporary fiction, poetry, and autobiography by women writers: Emphasis on cross-cultural perspectives and the works of African, African-American, Asian, Native American, Hispanic, Jewish, and Northern European women writers.</td>
<td>1503.00</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td></td>
<td>IGETC area 3</td>
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<tr>
<td>38.</td>
<td>+Lift Every Voice: Ethnicity, Gender, and Class in the United States</td>
<td>3</td>
<td>3</td>
<td>Prerequisite: Engl 1A</td>
<td>CSU, UC</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td>Through essays, poetry, stories and novels, a multitude of perspectives from across America’s cultures will be examined to better understand the differences we have in common.</td>
<td>1501.00</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td>IGETC area 3</td>
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<td>40.</td>
<td>+Jewish-American Writers</td>
<td>3</td>
<td>3</td>
<td>Prerequisite: Engl 1A</td>
<td>CSU, UC</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td>Study of stories, novels, plays, poetry, and essays by Jewish-American writers with emphasis on 20th-century writers: Their uniqueness, their links to tradition, and their contribution to American culture.</td>
<td>1503.00</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td>IGETC area 3</td>
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<tr>
<td>43.</td>
<td>+Introduction to the Study of Poetry</td>
<td>3</td>
<td>3</td>
<td>Prerequisite: Engl 1A</td>
<td>CSU, UC</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td>Introduction to the elements of poetry: Imagery, sound, form, tone, and diction.</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td>IGETC area 3</td>
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<tr>
<td>44A-B</td>
<td>+Masterpieces of World Literature</td>
<td>3-3</td>
<td>3</td>
<td>Prerequisite for Engl 44A and 44B: Engl 1A</td>
<td>CSU, UC</td>
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<td>Engl 44A is not prerequisite to Engl 44B</td>
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<td>Acceptable for credit: CSU, UC</td>
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<td></td>
<td>Lecture and discussion on selected masterpieces of world literature from classics to the present.</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td></td>
<td>IGETC area 3</td>
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<tr>
<td>46A-B</td>
<td>+Survey of English Literature</td>
<td>3</td>
<td>3</td>
<td>Prerequisite for Engl 46A and 46B: Engl 1A</td>
<td>CSU, UC</td>
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<td>Engl 46A is not prerequisite to Engl 46B</td>
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<td></td>
<td></td>
<td>Acceptable for credit: CSU, UC</td>
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<td>Close study of selected works by major British writers from Chaucer to Yeats: Literary qualities of the works read rather than their historical or social significance.</td>
<td>1503.00</td>
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<td>AA/AS area 3, 4d; CSU area C2</td>
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<td>IGETC area 3</td>
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</tbody>
</table>
48NA-TZ. Selected Topics in English  .5-5 units
See section on Selected Topics. 1501.00

49. Independent Study in English  .5-5 units
Course study under this section may be repeated three times.
See section on Independent Study. 1501.00

53. Technical Writing  3 units
3 hours lecture
Prerequisite: Engl 1A
Acceptable for credit: CSU
Analysis of the organization, style, and format of both technical and nontechnical writing: Training in preparation of informal and formal reports related to the student's field of interest; research reports, progress reports, proposals, status reports, and user manuals.
AA/AS area 4d

201A. Preparation for Composition and Reading  3 units
3 hours lecture
Prerequisite: Engl 250D or 292B or 292EB or satisfactory multiple-measures assessment of writing skills, and Engl 251D or 293B or satisfactory multiple-measures assessment of reading skills.
Intermediate approach to preparation for paragraph and theme development: Expository writing techniques on simple and complete thesis statements as a means of better organization of ideas.
AA/AS area 4a, 4d

201B. Preparation for Composition and Reading  3 units
3 hours lecture
Prerequisite: Engl 201A
Intermediate approach to preparation for paragraph and theme development: Expository writing techniques on simple and complete thesis statements as a means of better organization of ideas.
AA/AS area 4a, 4d

202. Reading for Information  3 units
3 hours lecture
Recommended preparation: Appropriate placement through multiple-measures assessment
Reading skills to prepare for college-level reading: Comprehension, vocabulary, and rate-improvement techniques.

203A. Accelerated English: Integrated Reading and Writing  5 units
4 hours lecture, 3 hours laboratory
Prerequisite: Engl 250D or satisfactory multiple-measures assessment of writing skills, and Engl 251D or satisfactory multiple-measures assessment of reading skills
Recommended preparation: Engl 295A-D and 208
Effective college reading and writing skills in an accelerated format: Intensive language learning and processing; writing workshop discourse; reading and comprehension laboratory; reading and writing strategies, skills, and techniques; first-year introduction to composition and reading; practice in expository and argumentative writing; and exposure to the type of close reading and text analysis expected of college students.
AA/AS area 4a, 4d

203B. Accelerated English: Integrated Reading and Writing  5 units
4 hours lecture, 3 hours laboratory
Prerequisite: Engl 203A
Continuation of college reading and writing skills in an accelerated format: Intensive language learning and processing; writing workshop discourse; reading and comprehension laboratory; reading and writing strategies, skills, and techniques; first-year introduction to composition and reading; practice in expository and argumentative writing; and exposure to the type of close reading and text analysis expected of college students.
AA/AS area 4a, 4d

208. Writing Workshop  .5-1 unit
.25-.5 hours lecture, .75-1.5 hours laboratory
Course study under this section may be repeated three times.
Individualized instruction in writing, utilizing computers: Grammar and punctuation, sentence structure, idea development and/or organizational skills.

210A-B. Creative Writing  3-3 units
3 hours lecture
Engl 210A is not prerequisite to Engl 210B
Writing fiction, poetry, and drama, and careful analysis of techniques used by established writers.
AA/AS area 3, 4d

217A-B. Shakespeare  3-3 units
3 hours lecture
Engl 217A is not prerequisite to Engl 217B
Study of selected works of Shakespeare.
AA/AS area 3, 4d
230A-B. +Introduction to American Literature
3-3 units
3 hours lecture
Engl 230A is not prerequisite to Engl 230B
230A: Survey of American literature from pre-colonial begin-
ings to Walt Whitman.
230B: American romanticism to literature of the 20th century.
AA/AS area 3, 4d 1503.00

232A-B. +Contemporary Women Writers
3-3 units
3 hours lecture
Engl 232A is not prerequisite to Engl 232B
Survey of contemporary fiction, poetry, and autobiography by
women writers: Emphasis on cross-cultural perspectives and
the works of African, African-American, Asian, Native American,
Hispanic, Jewish, and Northern European women writers.
AA/AS area 3, 4d 1503.00

243. +Introduction to the Study of Poetry
3 units
3 hours lecture
Introduction to the elements of poetry: Imagery, sound, form,
tone, and diction.
AA/AS area 3, 4d 1503.00

244A-B. +Masterpieces of World Literature
3-3 units
3 hours lecture
Engl 244A is not prerequisite to Engl 244B
Lecture and discussion on selected masterpieces of world
literature from classics to the present.
AA/AS area 3, 4d 1503.00

248NA-TZ. +Selected Topics in English .5-5 units
See section on Selected Topics. 1501.00

250A-C. +Basic Writing 1-5 units each level
1-5 hours lecture
Non-degree applicable
Course study under this section may be repeated two times.
Review of organizing of materials and writing correctly, including
spelling, grammar and punctuation. 4930.21

250D. +Basic Writing 1-5 units
1-5 hours lecture
Recommended preparation: Engl 250A-C
Non-degree applicable
Review of organizing of materials and writing correctly, including
spelling, grammar and punctuation. 4930.21

251A-C. Basic Reading 1-3 units each level
1-3 hours lecture
Non-degree applicable
Course study under this section may be repeated two times.
Practice in techniques to improve basic reading skills: Analysis
and correction of individual reading problems. 4930.70

251D. Basic Reading 1-3 units
1-3 hours lecture
Recommended preparation: Engl 251A-C
Non-degree applicable
Continuation of ENGL 251A-C. 4930.70

252A-B. Integrated Reading and Writing 5 units each level
4 hours lecture, 3 hours laboratory each level
Non-degree applicable
Course study under this section may be repeated one time.
Preparation in combined reading and writing instruction to
ensure success in college: Integrated reading, writing, and critical
thinking, using materials representing points of view and per-
spectives across the curriculum. 4930.20

253A-B. ++Computer-Assisted Composition .5-1 unit each level
1.5-3 hours laboratory
Open-entry/open-exit: Students may enroll up to the 12th week
of the semester.
Non-degree applicable
Course study under this section may be repeated one time.
Introduction to writing using the computer: Practice in writing
and revising essays and other related writing exercises. 1501.00

254. Spelling and Word Structures I 3 units
3 hours lecture
Non-degree applicable
Improvement of spelling ability through the systematic study
and application of rules which are basic to English spelling. 4930.20
256. Basic Grammar 1-3 units
1-3 hours lecture
Non-degree applicable
Developmental grammar: Sentence patterns, functions of parts of speech, and punctuation and the development of paragraph structure. 4930.20

258. +Writing Workshop (Basic Skills) .5-1 unit
.25-.5 hours lecture, .75-1.5 hours laboratory
Non-degree applicable
Course study under this section may be repeated three times. Individualized instruction in writing, utilizing computers: Grammar and punctuation, sentence structure, idea development and/or organizational skills. 4930.21

270A-D. ++The Writing Center .5-3 units each level
1.5-9 hours laboratory
Open-entry/open-exit: Students may enroll up to the 12th week of the semester.
Non-degree applicable
Course study under this section may be repeated three times. One-to-one assistance with any writing-related problem, project, or assignment in any discipline. 4930.21

280A-D. ++Communication Skills Laboratory .5-3 units each level
1.5-9 hours laboratory
Open-entry/open-exit: Students may enroll up to the 12th week of the semester.
Non-degree applicable
Course study under this section may be repeated three times. Assistance with language skills: Reading, grammar, spelling, vocabulary, and sentence structure/paragraph development. Students work at their own pace under the direction of an instructor or tutor. 4930.20

294A-D. Intensive Reading Improvement Workshop 1-5 units each level
1-5 hours lecture, 0-10 hours laboratory
Non-degree applicable
Course study under this section may be repeated three times. Modular course designed to improve students' reading ability through intensive work in problem areas: Reading efficiency, oral fluency, vocabulary development, textbook reading, and study skills. 4930.70

295A-D. +Fundamentals of Writing 3-5 units each level
3-5 hours lecture
Non-degree applicable
Course study under this section may be repeated three times. Writing course designed to teach basics of English grammar, correct sentence structure, paragraph development, and composition revision. 4930.21

348NA-TZ. +Selected Topics in English .5-5 units
Non-degree applicable
See section on Selected Topics. 4930.20
The English as a Second Language Department offers courses designed to develop reading, writing, listening, and speaking skills to students whose native language is not English.

**Suggested Guidelines for Student Level of Difficulty**

<table>
<thead>
<tr>
<th>SUBJECT AREA</th>
<th>LEVELS</th>
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<tbody>
<tr>
<td></td>
<td>PRE-I</td>
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<tr>
<td>Speaking</td>
<td>ESL 250A</td>
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<tr>
<td>Speaking/Study Skills</td>
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<tr>
<td>Writing</td>
<td>ESL 251A</td>
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<tr>
<td>Grammar</td>
<td>ESL 252A</td>
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<tr>
<td>Reading</td>
<td>ESL 253A</td>
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<tr>
<td>Vocabulary/Context</td>
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<td>Spelling/Phonics</td>
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<td>Pronunciation</td>
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<td>Conversation</td>
<td>ESL 205A</td>
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<tr>
<td>Lifeskills/Job Preparation</td>
<td>ESL 256</td>
</tr>
<tr>
<td>Vocational</td>
<td>ESL 258</td>
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</tbody>
</table>

**21A. +Writing 5 (Composition/Reading)** 5 units

- **5 hours lecture**
- **Prerequisite:** ESL 201B or appropriate placement through multiple-measures assessment
- **Recommended preparation:** ESL 202C (can be taken concurrently)
- **Acceptable for credit:** CSU, UC
- Advanced level of writing: Focus on reading, developing ideas, and writing expository essays. 4930.81
  AA/AS area 4a, 4d

**21B. +Writing 6 (Composition/Reading)** 5 units

- **5 hours lecture**
- **Prerequisite:** ESL 21A or appropriate placement through multiple-measures assessment
- **Recommended preparation:** ESL 202C (can be taken concurrently)
- **Recommended for those taking, or planning to take Engl 1A.**
- **Acceptable for credit:** CSU, UC
- High advanced level of reading and writing: Focus on developing critical thinking skills, writing expository essays, and introduction to writing a research paper. 4839.81
  AA/AS area 4a, 4d

**24. +Speaking/Study Skills 5** 4 units

- **4 hours lecture**
- **Prerequisite:** ESL 204 or appropriate placement through multiple-measures assessment
- **Acceptable for credit:** CSU
- Advanced level of spoken American English: Focus on oral and listening skills through film, radio, college lectures, presentations, debate and discussion; problem solving, decision making, and opinion forming emphasized using advanced patterns, structures, vocabulary, and idiomatic expressions of American English. 4839.81

**48NA-TZ. +Selected Topics in English as a Second Language** 5-5 units

- See section on Selected Topics. 4930.81

**200A. +Speaking 3** 5 units

- **5 hours lecture**
- **Prerequisite:** ESL 250B or appropriate placement through multiple-measures assessment
- Low intermediate level of speaking: Emphasis on grammar skills to improve both fluency and accuracy in American English. 4930.81
200B. +Speaking 4  
5 units  
5 hours lecture  
Prerequisite: ESL 200A or appropriate placement through multiple-measures assessment  
High intermediate level of speaking: Emphasis on grammar skills to improve fluency and accuracy in American English. 4930.81

200C. +Speaking 5 (Academic Speaking Skills)  
5 units  
5 hours lecture  
Prerequisite: ESL 200B or appropriate placement through multiple-measures assessment  
Continuation of high intermediate level of spoken American English: Through various forms of media, mini-lectures, problem solving, teacher-student presentations, role playing, and small-group discussions, students will apply learned English language patterns, structures, and vocabulary in everyday speech. 4930.81

201A. +Writing 3  
5 units  
5 hours lecture  
Prerequisite: ESL 251B or appropriate placement through multiple-measures assessment  
Recommended preparation: ESL 202A (can be taken concurrently)  
Low intermediate level of writing: Introduction to basic academic writing skills; expanding paragraphs into simple essays. 4930.81

201B. +Writing 4  
5 units  
5 hours lecture  
Prerequisite: ESL 201A or appropriate placement through multiple-measures assessment  
Recommended preparation: ESL 202B (can be taken concurrently)  
High intermediate level of writing: Further development of academic writing skills with a focus on well-developed paragraphs and short essays. 4930.81

202A. +Grammar 3  
3 units  
3 hours lecture  
Prerequisite: ESL 252B or appropriate placement through multiple-measures assessment  
Low intermediate level of English grammar: Introduction to complex grammar structures and sentence patterns. 4930.81

202B. +Grammar 4  
3 units  
3 hours lecture  
Prerequisite: ESL 202A or appropriate placement through multiple-measures assessment  
High intermediate level of English grammar: Continuation and expansion of ESL 202A. 4930.81

202C. +Grammar 5  
3 units  
3 hours lecture  
Prerequisite: ESL 202B or appropriate placement through multiple-measures assessment  
Formerly offered as ESL 22.  
Advanced level of English grammar: Focus on expanding, refining, and applying complex grammar skills to formal writing. 4930.81

203A. +Reading 3  
4 units  
4 hours lecture  
Prerequisite: ESL 253B or appropriate placement through multiple-measures assessment  
Low intermediate level of reading: Emphasis on development of academic vocabulary, and expanding critical skills essential for college-level reading. 4930.81

203B. +Reading 4  
4 units  
4 hours lecture  
Prerequisite: ESL 203A or appropriate placement through multiple-measures assessment  
High intermediate level of reading: Further development of academic vocabulary and critical reading skills essential for reading literature and college textbooks. 4930.81

205A. +Vocabulary and Idioms in Context 3  
3 units  
3 hours lecture  
Prerequisite: Appropriate placement through multiple-measures assessment  
Intermediate level of vocabulary through the study of words and idioms as used in context. 4930.81

205B. +Vocabulary and Word Analysis in Context 4  
3 units  
3 hours lecture  
Prerequisite: ESL 205A or appropriate placement through multiple-measures assessment  
High intermediate/low advanced level of vocabulary and content: Focus on vocabulary useful in academic courses; analysis of word derivations. 4930.81
226A-B. +English for the Childcare Provider 3
3 units each level
3 hours lecture
Recommended preparation for ESL 226A: ESL 201A or 203A.
Recommended preparation for ESL 226B: ESL 226A.
Course study under this section may be repeated one time.
Intermediate level ESL course: Designed to develop greater facility in reading, speaking, listening and writing skills in the childcare provider whose first language is not English and who is enrolled, or planning to be enrolled, in the Child Development program (A); continued development of reading, speaking, listening and writing skills for the childcare provider (B).
4930.81

227A-B. +English for the Healthcare Worker 3
3 units each level
3 hours lecture
Recommended preparation for ESL 227A: ESL 201A or 203A
Recommended preparation for ESL 227B: ESL 227A
Course study under this section may be repeated one time.
Intermediate level ESL course: Designed to develop greater facility in reading, speaking, listening and writing skills in the healthcare worker whose first language is not English and who is enrolled, or planning to be enrolled, in a healthcare program such as Associate Degree Nursing (A); continued development of reading, speaking, listening and writing skills for the healthcare worker (B).
4930.81

248NA-TZ. +Selected Topics in English as a Second Language .5-5 units
See section on Selected Topics.
4830.81

250A. +Speaking 1 5 units
5 hours lecture
Recommended preparation: Appropriate placement through multiple-measures assessment
Non-degree applicable
High beginning level of speaking: Emphasis on basic grammar skills; practice in speaking and understanding American English.
4930.82

250B. +Speaking 2 5 units
5 hours lecture
Prerequisite: ESL 250A or appropriate placement through multiple-measures assessment
Non-degree applicable
Continuation of the listening and speaking skills introduced in ESL 250A.
4930.82

251A. +Writing I 5 units
5 hours lecture
Recommended preparation: ESL 252A (can be taken concurrently) or appropriate placement through multiple-measures assessment
Non-degree applicable
Course study under this section may be repeated one time.
High beginning level of writing: Emphasis on basic sentences; punctuation rules; short narrative and descriptive paragraphs.
4930.82

251B. +Writing 2 5 units
5 hours lecture
Prerequisite: ESL 251A or appropriate placement through multiple-measures assessment
Recommended preparation: ESL 252B (can be taken concurrently)
Non-degree applicable
Continuation of writing skills introduced in ESL 251A.
4930.82

252A. +Grammar 1 5 units
5 hours lecture
Recommended preparation: Appropriate placement through multiple-measures assessment
Non-degree applicable
High beginning level of English grammar: Review and practice of basic grammar structures, sentence patterns, and parts of speech.
4930.82

252B. +Grammar 2 5 units
5 hours lecture
Prerequisite: ESL 252A or appropriate placement through multiple-measures assessment
Non-degree applicable
Continuation and expansion of basic grammar skills and sentence patterns introduced in ESL 252A.
4930.82

253A. +Reading I 3 units
3 hours lecture
Recommended preparation: Appropriate placement through multiple-measures assessment
Non-degree applicable
Course study under this section may be repeated one time.
High beginning level of reading: Focus on basic vocabulary development; techniques for reading comprehension.
4930.82
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>253B</td>
<td>+Reading 2</td>
<td>3</td>
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<tr>
<td></td>
<td>3 hours lecture</td>
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<tr>
<td></td>
<td>Prerequisite: ESL 253A or appropriate placement through multiple-measures assessment</td>
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<td></td>
<td>Non-degree applicable</td>
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<td></td>
<td>Continuation of the reading skills introduced in ESL 253A.</td>
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<tr>
<td>256.</td>
<td>+Spelling and Phonics of American English 2</td>
<td>5</td>
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<td>5 hours lecture</td>
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<td></td>
<td>Recommended preparation: Appropriate placement through multiple-measures assessment</td>
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<td>Non-degree applicable</td>
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<td></td>
<td>Study of the sounds and spelling of American English.</td>
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<td>257A</td>
<td>+Pronunciation 3</td>
<td>3</td>
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<td>3 hours lecture</td>
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<td></td>
<td>Recommended preparation: ESL 256 or appropriate placement through multiple-measures assessment</td>
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<td>Non-degree applicable</td>
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<td></td>
<td>Improvement in pronunciation, intonation, and fluency in English for speakers of English as a second language, with practice in the use of standard conversation expressions and styles.</td>
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<td>257B</td>
<td>+Pronunciation 4</td>
<td>3</td>
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<td>3 hours lecture</td>
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<td></td>
<td>Recommended preparation: ESL 257A or appropriate placement through multiple-measures assessment</td>
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<td>Non-degree applicable</td>
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<td></td>
<td>Continuation of ESL 257A: Improvement in pronunciation, intonation, and fluency in English for speakers of English as a second language, with practice in the use of standard conversational expressions and styles.</td>
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<tr>
<td>258.</td>
<td>+Conversation 2</td>
<td>3</td>
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<td></td>
<td>3 hours lecture</td>
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<td></td>
<td>Recommended preparation: Appropriate placement through multiple-measures assessment</td>
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<tr>
<td></td>
<td>Non-degree applicable</td>
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<td></td>
<td>Beginning level of spoken American English: Focus on self-expression and vocabulary needed for daily activities.</td>
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<tr>
<td>271-A-C</td>
<td>++ESL through Computers I</td>
<td>1</td>
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<td></td>
<td>1 hour lecture</td>
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<td></td>
<td>Open-entry/open-exit</td>
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<td></td>
<td>Non-degree applicable</td>
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<td></td>
<td>Course study under this section may be repeated two times. Basic ESL utilizing computers: Designed for beginning ESL students who have minimal English ability and who want to acquire basic English skills while learning beginning computer functions.</td>
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<tr>
<td>272-A-C</td>
<td>++ESL through Computers II</td>
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<td>1 hour lecture</td>
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<td>Open-entry/open-exit</td>
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<td></td>
<td>Non-degree applicable</td>
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<td>Course study under this section may be repeated two times. Continuing ESL utilizing computers: Designed for ESL students who have acquired some English ability and who want to continue developing English skills while learning intermediate computer functions.</td>
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<tr>
<td>290-A-C</td>
<td>+Beginning ESL 1</td>
<td>3-5</td>
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<td></td>
<td>3 units Level A, 4 units Level B, 5 units Level C</td>
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<td>3-5 hours lecture</td>
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<td>Recommended preparation: ESL 290A-C or appropriate placement through multiple-measures assessment. Basic level English as a Second Language course designed for those with minimal or no English skills: Focus on very basic grammar, and writing and reading lifeskills such as personal information, everyday activities, and feelings/emotions.</td>
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<tr>
<td>291-A-C</td>
<td>+Beginning ESL 2</td>
<td>3-5</td>
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<td>3 units Level A, 4 units Level B, 5 units Level C</td>
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<td>3-5 hours lecture</td>
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<tr>
<td></td>
<td>Recommended preparation: ESL 290A-C or appropriate placement through multiple-measures assessment. High beginning level English as a Second Language course designed for those with minimal English skills: Focus on high beginning level grammar, and writing and reading lifeskills such as personal information, everyday activities, and feelings/emotions.</td>
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