COURSE SYLLABUS

EDMX: 632
Technology and Communication for Special Populations
CRN 21846 EDMX 632 (02): 3 units
Thursdays: 6:00 – 8:45pm
Spring Semester 2003
Class Location: Univ. Hall 271

INSTRUCTOR:
Kathie T. Maltby, MS
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College of Education Mission Statement:
The mission of the College of Education Community is to transform public education by preparing thoughtful educators and advancing professional practice. We are committed to the democratic principles of educational equity and social justice for all learners, exemplified through reflective teaching, learning and service. We value diversity, collaboration, professionalism and shared governance.

CATALOG DESCRIPTION:
Terms, trends, history and current information bases on applications of technology and assistive and adaptive devices for working with children. Use of technologies for learners with mild, moderate, and severe disabilities for education programs in schools and agencies. Identification of interventions for effective learner communication and needed augmentative communication devices. Knowledge of system components and configuration of special and adaptive devices. Competency based, requiring laboratory work. *Prerequisite: EDUC 500 or equivalent*

COURSE DESCRIPTION:
Participants study and use technologies with learners with mild, moderate, and severe disabilities for education programs and agencies. Competencies developed are in ability to use computer based technologies and system components and to configure special and adaptive devices. Information is presented on terms, trends, history, and current information bases, applications of technology and assistive and adaptive devices for work with children. This course is competency based and requires laboratory work in addition to lecture and practice during scheduled class time.

Prerequisites: Admission to the Preliminary Level I Mild/Moderate and Moderate/Severe Disabilities Education Specialist Program with or without Multiple Subjects/BCLAD. **Successful completion of EDUC 500 or equivalent**. Demonstration of a basic understanding and practical use of representative programs for instruction and teacher productivity including word processing, databases, spreadsheets, graphics, telecommunications, networking, and multi-media presentations is absolutely required.

Reading/Materials Required:

☐ Readings as assigned from required texts and researched on the Internet, daily news, and professional journals.
  ▪ Computer and Web Resources for People with Disabilities (The Alliance for Technology Access)
  ▪ Assistive Technology in Special Education (Golden)
☐ **Purchase/Bring in to class one piece of current educational software** to demonstrate in class
☐ **Class handouts** (bring all handouts with you to class)
☐ **Manuals to equipment and software** (provided, to be used in class)

Supplies Required:

☐ **One 2" - three-ring binder measuring approximately 6" x 9"**
* Four 1.40 MB PC or Mac floppy disks
☐ One 100MB (or larger) zip disk - you MUST have this to save lab work done in class.
☐ University print card - you will be required to submit hard print copies of lab assignments printed in the lab - this is a requirement. May be purchased in Academic Hall 202.

COURSE OBJECTIVES:

Upon completion of this course, students will have acquired the knowledge and skills to:

1. Demonstrate understanding of ethics, legislation and policies governing assistive technology in education.

2. Locate and become familiar with various resource agencies at the national, state and local levels supporting assistive technology.

3. Explore and evaluate adaptive/assistive software designed for students with mild, moderate or severe disabilities.

4.   Explore and evaluate adaptive/assistive hardware designed for students with mild, moderate or severe disabilities.

5.   Be able to use the Internet to research and critically evaluate websites related to various topics in assistive/adaptive technology.

6.   Acquire skills in creating no/low tech adaptations for students with disabilities in the classroom.

7.   Demonstrate understanding of the evaluation process, service delivery models and funding as they relate to assistive technology.

8.   Ability to contribute to the development of educational goals and objectives that infuse assistive technology in IEPs and ITPs.

9.   Evaluate the effectiveness of software and hardware for individual learners in special education.

10.   Demonstrate skills in adapting curriculum and instruction for special populations using a variety of tools.

11.   Be familiar with assistive/adaptive devices in the areas of: augmentative and alternative communication; writing, reading, studying and mathematics; vision and hearing; positioning, seating and mobility; and activities of daily living.

12.   Acquire competencies in configuring and using adaptive devices including:

        a.   IntelliKeys
        b.   Switches and switch interface
        c.   Touch screens
        d.   Alpha Smart keyboard

13.   Acquire competencies in using specialize software such as:

        a.   Overlay Maker
        b.   Boardmaker
        c.   Co:Writer
        d.   Write Out Loud
        c.   Inspiration
        e.   IntelliMathics
        f.   IntelliTalk II

COURSE SYLLABUS

ADMINISTRATIVE REQUIREMENTS OF STUDENTS

COE ATTENDANCE POLICY: A good student is one who adheres to standards of dependability and promptness. This course is comprised of 16 class sessions across a 16-week period. **Students who miss three or more of the 16 classes (or 80%) of this course; or who are late for, or leave early from three or more sessions of this course, will be unable to receive a passing grade for this course (C+ or better).**

ASSIGNMENT POLICY: Each assignment is due on the date indicated on the syllabus/schedule. Late assignments will be only be accepted up to one week after stated due date and will receive only partial credit. Keep a hard copy of each assignment turned in. **Burden of proof of assignment completion is upon the student.** *This includes all lab sheets*.

MISSED LABS: Students may (with consent of the instructor) make up the labwork and submit the lab sheet. However, less than full points will be awarded as the student has missed the instructor's instruction and supervised in-class group work with peers. No labs will be accepted, nor made up, later than two weeks after the class session in which the information was covered.

Note: If you have extraordinary circumstances in your life, which will impact upon your attendance or assignments, please let us know. If you have any questions or concerns, please contact the instructor.

Plagiarism of any type will result in a failing grade. Students making unauthorized copies of copyrighted microcomputer software will receive a failing grade.

Students are **required** to keep a copy of **all** work (including lab assignments requiring papers and responses). In case any work becomes lost, **all proof of work accomplished is the responsibility of the student**.

It is strongly advised that students keep up with the assignments from week to week.

LAB ETIQUETTE:

- ➢ **ABSOLUTELY NO FOOD, DRINK, WATER, ETC IN THE LAB AT ANY TIME!!!** Students with food or drink in the lab will be **penalized participation and lab points.** Thank you for your attention to this matter.
- ➢ A collaborative professional considers his/her colleagues at all times. Much of the adaptive and assistive devices must be shared. Be sure to have each member of the group have hands-on with the devices and software in order to complete lab work.

➢ Much work for this course is collaborative. In real life, all team members must collaborate and participate in order to accomplish any completed project. Team members are expected to be considerate and group minded in scheduling working sessions to complete course assignments.
➢ Please wash your hands before using any adaptive equipment. The keyboard membranes and switches are very sensitive. Also, do not write on top of keyboard membranes.

Note: the one principle of adaptive technology: If it is going to malfunction, it will do so when you are in front of a group! Please be patient!

ACADEMIC REQUIREMENTS
California State University San Marcos has adopted an all-university writing requirement. In each course, students are required to write at least 2500 words in essays, exercises, papers and examinations.

ASSIGNMENTS AND POINTS FOR MEETING COURSE OBJECTIVES:

Assignments:	Points:
Collaboration/Participation/Attendance	80
Lab assignments	150
Customized Overlay	50
SWERL	95
Presentation of SWERL	25
Vendor/Product Research Paper	100
Website Review	50
Written reflections on readings	50
Total Points	**600**

Lab assignments: (15 labs @ 10 points each = 150 points) The labs are in-class assignments; please remember to turn in your labs at the end of class. If the lab sheets are not turned in, no grade will be given.

Collaboration/Participation: (16 sessions @ 5 points each = 80 points)
Be sure to read both the attendance and missed labs policies stated above under administrative requirements.

Detailed formats for all assignments are located in the bound reader.

SWERL (95 points)
Students will use the Software Evaluation for Reaching Learners (SWERL) and complete a student evaluation using the software and a software analysis. In addition, students will create a teaching guide on the software: tips on how to use the manual and software, evaluation of pros and cons of the program, how this software meets curriculum standards, and examples of instructional purposes.

Presentation of SWERL: (25 points)
Students will present the software evaluated using the SWERL and share their findings.

Vendor/Product Research Paper: (100 points)
Each student will research products for individuals with disabilities. Topics may include the following:

☐ Augmentative and Alternative Communication
- Computer Access
- Seating and Positioning
- Wheelchair and Mobility
- Devices for the Visually Impaired
- Devices for the Hearing Impaired (excluding hearing aids and cochlear implants)
- Voice Recognition
- Tools for a Specific Disability
- Tools to Support Specific Academic Areas
- Aids for Daily Living (electronic and non-electronic)

Customized Overlay Assignment: (50 points)
Students will create a custom overlay for a written language activity. This overlay will be created using the software program Overlay Maker for use with an IntelliKeys keyboard. Students will be required to provide a description of the child's abilities and a summary of the lesson plan. A short oral presentation of the custom overlay and its use will be required.

Website Review (50 points)
Each student will research 5 websites on a single topic of assistive technology and complete a written summary.

Written Reflection on Readings: (5 reflections @ 10 points each = 50 points)
Students will complete five written reflections related to assigned readings. These reflections will be completed during weekly class sessions.

CALCULATION OF COURSE GRADE

Points will be totaled for all assignments and percentages will be calculated. Grades are then computed according to the following

GRADING SCALE: (**Represents percentages of total points**)

	A 93-100	A- 90-92
B+ 87-89	B 83-86	B- 80-82
C+ 77-79	C 73-76	C- 70-72

Criteria for grading participation:
Participation points will be assigned on the following criteria: attendance, collaborative cooperation in all labs, classes, and group assignments; enthusiasm for the content and activities, respect for the speakers; patience and flexibility with the technology; appropriate use of lab, hardware and software; Respect for the lab environment and equipment, e.g., absolutely no food or drink in the lab.

Criteria for course grading: (CSUSM General Catalog)

A (Excellent): Performance of the student has been at the highest level, showing sustained excellence in meeting all course requirements and exhibiting an unusual degree of intellectual initiative.

B (Good): Performance of the student has been at a high level, showing consistent and effective achievement in meeting course requirements.

C (Satisfactory): Performance of the student has been at an adequate level, meeting the basic requirements of the course.

NOTE: The minimum acceptable grade for course in the professional education sequence is C+, but a B average must be maintained.

D (Passing): Performance of the student has been less than adequate, meeting only the minimum course requirements.

F (Failing): Performance has been such that minimal course requirements have not been met.

COURSE SYLLABUS

SCHEDULE for EDMX 632
Technology and Communication for Special Populations

	Class Date:	Topics	Readings Due	Labs	Assignments Due
1	1/23	Course Overview, Student Profiles			
2	1/30	Introduction to Assistive Technology; Assignment Review	C- Chapters 2 and 4		
3	2/6	Computer Basics; Web Research	*G- pages 43-62*	Website lab	
4	2/13	Physical Adaptations	*G- pages 49-55*	Low tech lab	
5	2/20	Alternate Input; Switch software	C-pages 173-209	Switches & software lab	**Website Assignment**
6	2/27	Alternate Output; Specialized Products	C- pages 228-245	IntelliKeys; Overlay Maker labs	
7	3/6	Augmentative Communication	C- pgs 246-262	Boardmaker lab	
8	3/13	Laws and Assessment	C-chapters 5 & 6 G- pages 3-9	Assessement Tools Lab	
9	3/20	Work session for Custom Overlay and Communication Boards	G-pages 23-38		
10	3/27	Student Presentations of Custom Overlays and Communication Boards			**Custom Overlay/Comm. Boards and Oral Presentations**
11	4/3	Spring Break			
12	4/10	Student Vendor Presentations			**Vendor Project and Oral Presentation**
13	4/17	Processing Aids: Tools for Learning Disabilities	C-pages 210-217 G- pages 40-48	Co:Writer; Write Out Loud Lab; Inspiration Lab	
14	4/24	IEPs and ITPs	C-Chapter 8 G-pages 11-16	Case Studies: Goals/Objectives Lab	
15	5/1	SWERL Presentations	G- pages 17-21	Software Review lab	<u>ALL SWERL papers due;</u> <u>Oral Presenations</u>
16	5/8	SWERL Presentations			Oral Presentations
16	5/15	SWERL Presentations			Oral Presentations

C= Computer and Web Resources   G=Assistive Technology in Special Education by Diane Golden