

Alternative Scheduling at University of Alaska Anchorage

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Past discussion of alternative scheduling at the University of Alaska Anchorage have revolved around two issues – better service to students by offering more options and times (particularly non-traditional students) and the ability to optimize space as a resource. Alternative scheduling is being viewed as any course taught in a non-traditional manner not constrained by the traditional 16-week semester at traditional Monday through Thursday schedules. Current assumptions about alternative scheduling are not always correct. This report is designed to report on current alternative scheduling at UAA and stimulate discussion on the use of these alternative delivery and scheduling models for the future.

Table 1 (see page 4) summarizes the current use of alternative scheduling and classifies them three ways:

- a. Weekend scheduling – Friday, Saturday, Sunday
- b. Open Enrollment scheduling
- c. Distributed or Distance Learning Models

This study created an unduplicated set of alternative scheduled classes. A handful of Open Enrollment and Weekend classes appeared on both lists and were adjusted to the more appropriate classification.

While there are other innovations appearing in some departments, most are still tied to the standard semester calendar and weekday schedule. Of the 2,469 group classes scheduled by UAA during the Fall 2000 semester, 545 or 22 percent were non-traditional in their scheduling. This ranges from 19 percent on the Anchorage campus to 30 percent on the extended college campuses. Group classes were used despite the fact that some portion of alternative classes is classified otherwise. This is because the majority of non-group classes are in fact non-scheduled individualized study. Others may want to use other benchmarks such as total enrollment, which is also provided in the tables.

The high proportion of classes that are scheduled differently from the norm suggests that UAA does attempt to respond to customer demand for a variety of scheduling alternatives. This is particularly true of the extended campuses, which schedule 39 percent of all alternative classes but are only 29 percent of all scheduled group classes.

While one-fifth of scheduled group sections are alternatively scheduled, this only constitutes 18 percent of those enrolled in group classes and 16 percent of student credit hours. This pattern is due to slightly lower average enrollment per class and a larger proportion of one-credit classes. Of the 555 alternatively scheduled sections, 430 are Weekend, 71 are Open Entry and 44 are Distance Delivery. Most of these classes are Lower Division (69.2%), followed by Upper Division (11.2%), Developmental (7.6%), and Professional (4.9%).

Table 2 focuses on the 430 Weekend classes (Friday-Saturday-Sunday). Sixty percent of these classes are on the Anchorage campus though many of these are scheduled off campus and scheduled by CTC (29%). Almost one quarter of classes on extended college campuses are on the

Weekend with the highest number occurring at Mat-Su and PWSCC. In total, 14,225 student credit hours are generated using Weekend classes. Two-thirds of these classes are lower division. Friday scheduling constitutes 61 percent of Weekend classes, which suggests that a minority is actually scheduled on the weekend. About 45 percent of Weekend Classes use traditional semester long scheduling and 55 percent are shorter non-traditional schedules. Many disciplines have at least some weekend scheduling, but the largest include CIOS (13%) followed by Education (all within School) (7%), Mathematics (6%), and Nursing, Physical Education and Art (5% each).

Table 3. Preferences for Scheduling

	Mo-Th	Fr	Sa-Su
Morning (7AM - 11:30 AM)	31.6	21.4	8.0
Day (12 PM- 5:00 PM)	33.9	22.4	9.0
Evening (5:30 PM-10:00 PM)	44.8	37.8	12.9

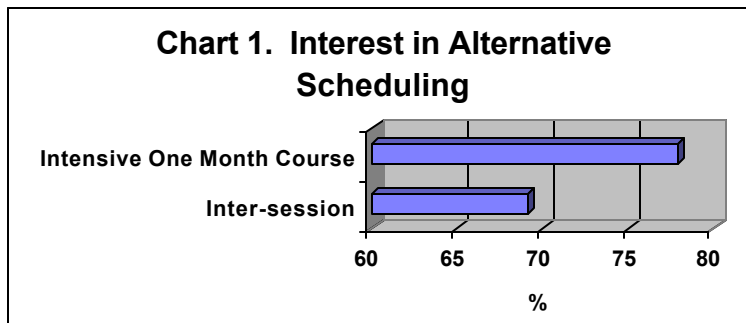
Table 3 is from the Spring 2000 Student Survey and looks at demand for course scheduling. This is duplicated demand but notes that Friday is preferred by over one-fifth of students and Saturday-Sunday but less than 10 percent of students. These numbers suggest that while offerings tend to follow the same pattern as demand, the interest in Friday through Sunday classes is higher than the number offered. The problem, of course, is forecasting what courses would be successful for weekend scheduling. Currently, emphasis is on community courses, some

GER courses and specialty courses with a pre-defined customer base of majors. Most units, however, do not have a clear understanding of which classes will succeed and which will fail. Past scheduling attempts have been haphazard. Poor attendance in one section scheduled for the weekend meant a department avoided other scheduling experiments. In fact, many classes are scheduled on the weekend for the wrong reasons – usually related to faculty or adjunct availability – rather than customer demand. In fact, demand analysis is used very little at the level where most scheduling occurs – the department. Most chairs rely on historical precedent and faculty needs rather than any understanding of the students interested in taking their classes.

Table 4 summarizes the 71 Open Entry classes scheduled this fall semester. The majority (66%) of these sections come from one discipline – Computer Information and Office Systems. This is due to the use of an open lab system both on the Anchorage campus and Extended College campuses, which originally serviced the OMT certificate and AAS degree programs and now include software proficiency courses. These facilities have fallen on hard times in recent years having had staffing, funding, and marketing problems, particularly on the Anchorage campus. The only other major effort in this type is a non-credit PE and recreation program developed by PWSCC. The Open Entry model does not work in many instances but is an interesting, though poorly understood, approach for self-motivated students who need flexible scheduling to succeed. It would seem to work best with “skills” type classes but again few departments have explored this approach.

Table 5 looks at the 44 sections of the Center for Distributed Learning. Most are lower division (82%) and prerecorded television courses (77%).

There is the beginning of newer delivery alternatives with three web sections being offered this fall. While distance or distributed education models have accelerated through out the country, UAA’s, and for that matter UA’s, efforts have been slow and lack the necessary institutional supports to succeed. The use of interactive and internet-based technologies has been of particular concern, but the staff and other support mechanisms now appear to be providing an opportunity for a more rapid expansion. Current barriers include self-support funding models, uneven and some cases a hostile reaction from many academic departments, and the lack of skill on campus to move these models forward.



While there have been attempts to use alternative scheduling models, UAA has not addressed other options which appear to have strong student interest. Chart 1 illustrates potential interest and demand for two options – intensive semester and inter-session. Both of these models have very strong student interest as measured in the Spring 2000 Student Survey. Both have been discussed at length for a number of years on this campus with little progress made to test or roll out either. Universities can be fairly conservative organizations but understanding demand, looking at alternatives, and experimenting with how we deliver our product is critical for the future of UAA.

Capacity is another issue and an estimated 60 percent of alternatively scheduled seats are being occupied this fall semester. This is somewhat below the average of group or all classes scheduled suggesting these are generally not as efficient as other classes with somewhat greater excess capacity. Interestingly, the Extended College campuses capacity rate is about the same for group or alternative classes. However, their general capacity rates are significantly below those of the Anchorage campus. Despite this lower utilization rate, it should be noted that most of what we currently offer has been in place for a number of years and little has been done to grow current alternative offerings or experiment with new models. Another question is whether students taking these alternatively scheduled courses would in fact be in regularly scheduled ones. It is likely that many students would be lost since alternative scheduling is the only way these students manage to stay in school.

Conclusion

The University of Alaska Anchorage has a wide array of course offerings using non-traditional scheduling which serve a significant number of students. The marginal cost of these courses produce a high benefit by meeting the needs of substantial numbers of students who may not attend UAA otherwise. If two-thirds of the credit hours derived this way would be lost if these courses were not scheduled, UAA could expect a 10 percent drop in credit hour production and the revenues related to them.

The problem we face, however, is the lack of innovation in recent years. UAA must continue to renew itself and one aspect of that is offering classes using a variety of schedules, technologies and delivery methods. The University should not stand on its past successes but move to enrich its academic offerings by providing classes in new and innovative ways.

Recommended areas of further study would include:

- a. Use the Spring 2000 Student Study to look at a student's scheduling preferences compared to what they actually enrolled in for that semester.
- b. Look at the impact of full-time employment and other factors on schedule preferences and actual scheduling behavior.

One problem with any study of the ongoing condition is the constraints that students find themselves in when selecting classes. This is especially true for degree seeking students who have limited choices. It is likely that demand and actual behavior do not coincide well simply because current behavior is determined by availability rather than preference.

Table 1: Summary of Alternative Scheduling

Summary of All Classes	Sections Offered	Total Enrolled	Total SCH	Capacity	Avg Class Size	Unused Capacity	Capacity Use Rate
Total All Classes	3,007	46,330	124,658	75,282	15	28,952	62%
Total Group Classes	2,469	44,549	120,851	65,041	18	20,492	68%
Anchorage Group	1,749	35,616	98,238	48,970	20	13,354	73%
Extended Group	720	8,933	22,613	16,071	12	7,138	56%
Total Alternative Scheduled Classes	545	7,703	18,507	12,775	14	5,072	60%
% of Total Group Classes	22%	17%	15%	20%		25%	
Total Anchorage Alternative	326	5,388	14,596	8,706	17	3,318	62%
% of Anchorage Total Group	19%	15%	15%	18%		25%	
Total Extended Alternative	219	2,315	3,911	4,069	11	1,754	57%
% of Extended Total Group	30%	26%	17%	25%		25%	
Total Friday-Saturday-Sunday	430	5,885	14,225	9,421	14	3,536	62%
Total Anchorage Campus	258	4,072	10,979	6,200	16	2,128	66%
Total Extended Campuses	172	1,813	3,246	3,221	11	1,408	56%
Total Open Entry	71	703	945	1,281	10	578	55%
Total Anchorage Campus	24	201	280	433	8	232	46%
Total Extended Campuses	47	502	665	848	11	346	59%
Total Distributed Learning	44	1,115	3,337	2,073	25	958	54%
Level of Instruction - Alternative							
Developmental	42	551	1,212	804	13	253	69%
Lower Division	384	5,612	13,167	9,058	15	3,446	62%
Upper Division	62	910	2,745	1,580	15	670	58%
Professional	27	239	388	702	9	463	34%
Graduate	30	391	995	631	13	240	62%

Table 2: Friday-Saturday-Sunday Scheduling

Summary of All Classes	Sections Offered	Total Enrolled	Total SCH	Total Capacity	Avg Class Size	Unused Capacity	Capacity Use Rate
Total Classes	3,007	46,330	124,658	75,282	15	28,952	62%
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Anchorage Group	1,749	35,616	98,238	48,970	20	13,354	73%
Extended Group	720	8,933	22,613	16,071	12	7,138	56%
Total Friday-Saturday-Sunday	430	5,885	14,225	9,421	14	3,536	62%
% Weekend/Total Group	17%	13%	12%	14%		17%	
Schools/Colleges							
CAS	60	1,307	3,760	1,689	22	382	77%
CBPP	17	237	381	469	14	232	51%
CHESW	56	787	2,347	1,183	14	396	67%
CTC	125	1,741	4,491	2,859	14	1,118	61%
Subtotal Anchorage	258	4,072	10,979	6,200	16	2,128	66%
% Sub Anch /Ttl Anch Group	15%	11%	11%	13%		16%	
Kodiak	31	446	762	625	14	179	71%
Kenai - Kachemak Campus	20	175	292	276	9	101	63%
Kenai - Kenai Campus	18	194	454	368	11	174	53%
Mat-Su	51	500	869	972	10	472	51%
Military	11	145	387	253	13	108	57%
PWSCC	41	353	482	727	9	374	49%
Subtotal Extended Campuses	172	1,813	3,246	3,221	11	1,408	56%
% Sub Extend/Total Ext Grp	24%	20%	14%	20%		20%	
Anchorage Off-Campus							
Eagle River	10	166	491	305	17	139	54%
Elmendorf AFB	3	53	179	108	18	55	49%
Ft. Richardson	11	175	602	261	16	86	67%
Anch School District	17	222	421	518	13	296	43%
Field	9	105	155	134	12	29	78%
Other Off Campus	26	228	464	406	9	178	56%
Subtotal Anch Off Campus	76	949	2,312	1,732	12	783	55%

Table 2: Friday-Saturday-Sunday Scheduling continued...

	Sections Offered	Total Enrolled	Total SCH	Capacity	Avg Class Size	Unused Capacity	Capacity Use Rate
Level of Instruction							
Developmental	38	480	1,090	720	13	240	67%
Lower Division	288	4,068	9,621	6,330	14	2,262	64%
Upper Division	52	720	2,179	1,130	14	410	64%
Professional	22	226	340	610	10	384	37%
Graduate	30	391	995	631	13	240	62%
Day(s) Scheduled							
Sunday	13	96	214	245	7	149	39%
Saturday	114	1,520	3,753	2,572	13	1,052	59%
Saturday-Sunday	24	325	503	513	14	188	63%
Friday	262	3,735	9,481	5,711	14	1,976	65%
Friday-Saturday	17	209	275	380	12	171	55%
Duration							
Semester Model	195	3,104	9,111	4,447	16	1,343	70%
Other Model	235	2,781	5,114	4,974	12	2,193	56%
Disciplines							
Accounting	2	22	66	60	11	38	37%
Agriculture	3	27	45	72	9	45	38%
Ak Outdoor Experiential Ed	15	175	314	241	12	66	73%
Anthropology	2	12	36	40	6	28	30%
Applied Statistics	1	18	54	30	18	12	60%
Architect Engineering Tech	1	8	32	16	8	8	50%
Art	20	166	318	290	8	124	57%
Auto/Diesel Technology	5	58	364	76	12	18	76%
Aviation Technology	7	163	358	204	23	41	80%
Biology	9	102	255	151	11	49	68%
Business Administration	8	66	162	223	8	157	30%
Chemistry	8	99	88	146	12	47	68%
Civil Engineering	1	8	-	20	8	12	40%
Communication	7	148	444	171	21	23	87%
Community Education	6	80	73	128	13	48	63%
Computer Info & Office Sys	54	663	1,032	1,081	12	418	61%

Table 2: Friday-Saturday-Sunday Scheduling continued...

Disciplines	Sections Offered	Total Enrolled	Total SCH	Capacity	Avg Class Size	Unused Capacity	Capacity Use Rate
Counseling	2	37	37	44	19	7	84%
Creative Writing and Lit A	3	40	40	54	13	14	74%
Culinary Arts	5	74	162	90	15	16	82%
Dance	2	21	30	32	11	11	66%
Dental Assisting	4	24	-	24	6	-	100%
Dental Hygiene	2	24	120	24	12	-	100%
Dietetics & Nutrition	1	3	3	20	3	17	15%
Early Childhood Development	2	50	118	50	25	-	100%
Economics	2	52	83	70	26	18	74%
Ed Dev and Leadership	5	31	93	72	6	41	43%
Education	17	182	272	390	11	208	47%
Education: Adult General	4	58	120	98	15	40	59%
Education: Elementary Subj	4	85	612	125	21	40	68%
Education: Reading Subj On	1	24	72	40	24	16	60%
Education: Special Ed Cour	1	1	1	15	1	14	7%
Electrical Engineering	1	9	36	16	9	7	56%
Electronics Technology	13	64	241	290	5	226	22%
Emergency Med Tech	3	40	240	50	13	10	80%
Engineering Science	2	73	219	88	37	15	83%
Engineering Science Mgmt	1	15	30	20	15	5	75%
English	11	191	564	243	17	52	79%
French	4	40	112	85	10	45	47%
Geography	3	93	183	123	31	30	76%
Geology	5	82	220	117	16	35	70%
Geomatics	1	9	36	20	9	11	45%
German	1	18	72	25	18	7	72%
Health Care Assisting	8	73	153	153	9	80	48%
Health Sciences	7	23	12	71	3	48	32%
History	4	72	216	129	18	57	56%
Human Services	5	71	205	106	14	35	67%
Humanities	1	19	57	25	19	6	76%
Industrial Technology	9	92	99	141	10	49	65%
International Studies	1	26	78	25	26	(1)	104%

Table 2: Friday-Saturday-Sunday Scheduling continued...

Disciplines	Sections Offered	Total Enrolled	Total SCH	Capacity	Avg Class Size	Unused Capacity	Capacity Use Rate
Journalism & Public Comm	3	43	129	125	14	82	34%
Justice	1	15	45	30	15	15	50%
Marine Technology	3	95	95	120	32	25	79%
Mathematics	27	615	2,271	881	23	266	70%
Mechanical Tech	1	9	27	14	9	5	64%
Medical Assisting	3	20	60	31	7	11	65%
Medical Lab Tech	2	10	32	45	5	35	22%
Military Science	3	49	30	70	16	21	70%
Music	2	30	50	45	15	15	67%
Nursing/Nursing Science	21	272	794	341	13	69	80%
Occupational Certif Training	1	7	28	10	7	3	70%
Petroleum Technology	2	16	48	60	8	44	27%
Philosophy	3	70	210	94	23	24	74%
Physical Ed & Rec Non-cred	3	12	4	52	4	40	23%
Physical Education	21	282	364	530	13	248	53%
Physics	1	22	22	24	22	2	92%
Political Science	2	23	69	30	12	7	77%
Preparatory English	8	152	256	161	19	9	94%
Psychology	9	198	422	300	22	102	66%
Public Administration	4	60	88	85	15	25	71%
Social Work	11	132	282	235	12	103	56%
Sociology	1	25	75	36	25	11	69%
Spanish	6	115	441	160	19	45	72%
Theater	3	37	39	40	12	3	93%
Welding Tech	5	45	168	78	9	33	58%

Table 4: Open Entry Enrollment

Schools/Colleges	Sections Offered	Total Enrolled	Total SCH	Capacity	Avg Class Size	Unused Capacity	Capacity Use Rate
Total Open Entry	71	703	945	1,281	9.9	810	55%
CBPP	10	116	128	180	11.6	64	64%
CTC	14	85	152	253	6.1	168	34%
Total Anchorage Campus	24	201	280	433	8.4	232	46%
Kodiak	8	37	47	144	4.6	107	26%
Kenai - Kachemak Campus	5	29	28	90	5.8	61	32%
Kenai - Kenai Campus	8	28	46	144	3.5	116	19%
Mat-Su	15	110	246	271	7.3	161	41%
PWSCC	11	298	298	198	27.1	(100)	150%
Total Extended Campuses	47	502	665	848	10.7	346	59%
Level of Instruction							
Developmental	3	45	44	54	15.0	9	83%
Lower Division	60	636	830	1,083	10.6	447	59%
Upper Division	4	10	26	72	2.5	62	14%
Graduate	4	12	45	72	3	60	17%
Disciplines							
Aviation Technology	4	20	39	72	5.0	52	28%
Vocational Education	1	1	3	18	1.0	17	6%
Technology	2	5	20	36	2.5	31	14%
Vocational Education	5	16	48	90	3.2	74	18%
Preparatory English	3		44	54	0.0	54	0%
Physical Ed & Rec Non-credit	9	295	295	162	32.8	(133)	182%
CIOS	47	321	496	848	6.8	527	38%

Table 5: Center for Distributed Learning

Type of Sections	Sections Offered	Total Enrolled	Total SCH	Capacity	Average Capacity	Avg Class Size	Unused Capacity	Capacity Use Rate
All sections	44	1,115	3,337	2,073	51	27	958	54%
Subtotal of sections that are stacked	3							
Prerecorded TV delivered	34	845	2,584	1,605	52	26	760	53%
Live television broadcast	2	41	123	100	100	41	59	41%
Web delivered	3	68	201	100	33	23	32	68%
Video tape at home	5	161	429	268	54	32	107	60%
Level of Instruction								
Developmental	1	26	78	30	30	26	4	87%
Lower Division	36	908	2,716	1,645	46	25	737	55%
Upper Division	6	180	540	378	63	30	198	48%
Graduate	1	1	3	20	20	1.00	19	5%

Table 5: Center for Distributed Learning continued...

Disciplines	Sections	Total Enrolled	Total SCH	Capacity	Unstack Sections	Average Capacity	Avg Class Size	Unused Capacity	Capacity Use Rate
Accounting	2	28	84	60	2	30	14	32	47%
Anthropology	1	23	69	30	1	30	23	7	77%
Art	1	31	93	35	1	35	31	4	89%
Business Administration	4	88	261	200	4	50	22	112	44%
Biology	1	43	129	60	1	60	43	17	72%
Dietetics & Nutrition	1	55	165	60	1	60	55	5	92%
Economics	2	53	159	100	2	50	27	47	53%
English	1	19	57	20	1	20	19	1	95%
French	2	22	88	60	2	30	11	38	37%
Geography	3	80	186	190	3	63	27	110	42%
German	2	7	28	60	2	30	4	53	12%
History	9	371	1,110	648	8	81	46	277	57%
Journalism & Public Comm	1	20	60	50	1	50	20	30	40%
Japanese	2	13	36	60	1	60	13	47	22%
Justice	2	6	18	20	1	20	6	14	30%
Mathematics	2	55	162	60	2	30	28	5	92%
Psychology	2	81	243	100	2	50	41	19	81%
Sociology	3	67	201	150	3	50	22	83	45%
Spanish	2	29	116	60	2	30	15	31	48%
Theater	1	24	72	50	1	50	24	26	48%

Notes:

Sections Offered = Credit Sections offered as of Fall 2000 Opening date.

Total Enrolled = Total enrollment as of the Fall 2000 Opening date and includes auditors.

Total SCH = Actual number of credit hours enrolled, excludes auditors

Capacity = Capacity is the total number of seats available calculated by the maximum number of students that can enroll in the section. This limit is set by the Department, but does not exceed room capacity.

Average Capacity = Capacity / Sections (for CDL classes Stacked Sections were subtracted)

Average Class Size = Total Enrolled / Sections (for CDL classes Stacked Sections were subtracted)

Unused Capacity = Capacity - Total Enrolled

Capacity Use Rate = Percent of seats filled in sections

11 Sections were coded both open entry and weekend. 10 were judged to be Open Entry in type and one was judged to be Weekend. Duplicates were removed.

The Weekend Class summary contains about 9 non-group classes such as practicums, etc.

They were kept in the data because they seemed to meet regularly on a weekend.

The percent of total calculation was made on the number of Total Group Classes rather than All Classes.

While some alternative courses are in fact labeled "Other", they are relatively small and the "Other" category is substantially composed of non-scheduled, non-group classes which would distort the proportion.