"Claim"
 Methodist Abdrakhmanova A. Zh. _____
27.02.2017.

PLAN
carrying out subject week of the Commission of Applied geodesy
Monday (27.02.17)
Competition in the specialty:
3 course – "Working with optical plummet»
By teacher of special disciplines of Samerkhanov S. G.
The time of the 1400. Venue: 33 office.

Open lesson on the subject Of "electronic geodetic measuring instruments" in the group of 302 on 1 pair is conducted by a teacher special. disciplines Stupak A. I.
Release geodetic newspaper. Was a teacher of special disciplines Romanov A. V.
Tuesday (28.02.17)
Competition: "Original geodetic knowledge-HBS" for 2nd year students. Hold teachers Stupak A. A. and Salimov, R. M., the time of the 1530. Venue: 21 rooms.

Wednesday (1.03.17)
Competition in the specialty: "Geodetic relay race" among 3rd year students (groups 301 and 302). Conducts a teacher of special disciplines Shesternina Ie.
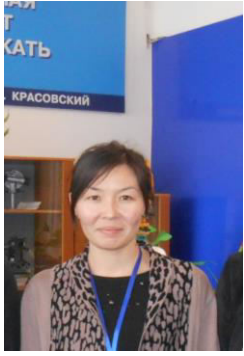The time of the 1530. Location: 36 the Cabinet.

Thursday (2.03.17)
Competition on a speciality: "the Stakes for surveying»
among the 4th year students (401, 402, 403, 405, 406)
The time of the 1430. Venue: 45 office
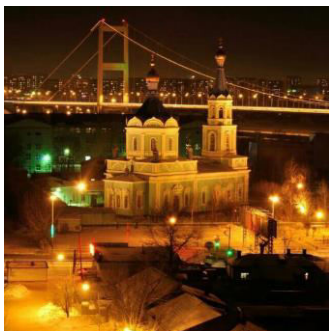By teacher of special disciplines: Medianova E. M.

The combined class hour under the heading: "Spiritual and moral education" for 2nd year students. Conducts group 202. The head of the group Churina T. Yu Venue Assembly hall

Friday (3.03.17)
Competition of presentations on the subject of AIS on the theme: "Architectural masterpieces»
Conducts teacher specials. disciplines Romanova I. P. among the 2nd year students 201, 202, 207 groups. Location: 46 the Cabinet.

Check jobs published in the geodetic newspaper for
 students of the 2nd course. Was a teacher of special disciplines Romanov A. V.

Round table seminar " Modern technologies in topographic and geodetic production used in engineering and geodetic practice»
Spend Stupak A. A., Balagurov M. S., Salimov R. M

Summing up a week of fee applications of geodesy.
Protocol of the week " Applied geodesy»

 On March 7, 2017. Was attended by all the members of the Commission.

The agenda of the meeting:
1. Results of the week "Applied geodesy" – Churina T. Yu.
Discussion:
On the issue of "the results of the week of the Commission" were: Churina T. Yu.
 - From 27.02.17 to 3.03.17 in College passed week of the Commission "Applied geodesy". All activities were carried out according to the approved plan.

27.02.17 was held an open lesson on the subject Of "electronic geodetic measuring instruments" in group 302 on 1pare teacher special. disciplines Stupak A. I.
Course of the open lesson

1. The organization of the lesson.
1.1. Before the lesson, get all the equipment in the laboratory, ventilate the office.
1.2. Arrange the tables according to plan.
1.3. Neatly put sets of equipment to the tables.
1.4. Spread out the handout, (route map),
1.5. Manual use of the total station.
1.6. A training manual to download data to your computer.
1.7. Spread out a handout on the seats of guests–teachers:
1.7.1. Analysis of the lesson,
1.7.2. Handout.
1.7.3. Lesson plan for the lesson.

2.   Greeting
2.1. Checking present: the Attendant stands up says the absence of certain students.
2.2. Setting the topic and message the purpose of the lesson:
2.2.1. Topic: measuring with electronic total station Focus. Serif, definition of square.
2.2.2. To consolidate the skills students can perform measurements with electronic total station Focus 6, by reverse tick marks, measure the space to store the raw data into the computer.
2.3. Introductory conversation, briefing, video.
2.3.1. Tell about the rules of the relay, the organization of the relay:
Stage 1: installing the appliance
2 stage reverse serif
3 stage shooting situation
Stage 4 the definition of the areas
5 stage downloading from the device
2.3.2. Instructing on the implementation of the backseat in the form of a video tutorial.
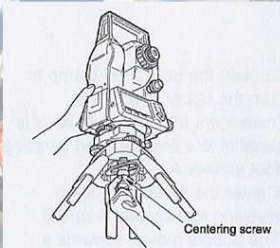
Then begins the relay

STAGE 1. Install the instruments and bring them into the working position.

STAGE 2. Installation of the station by the method of backseat.
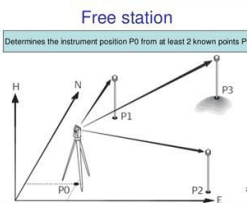
STAGE 3. The shooting situation

STAGE 4 the Definition of the areas

STAGE 5. Download information deals with the foreman.

Summing up the results on the screen Of " information Board»5 ЭТАП.

Presentation of certificates

The first place at the end of the relay team received № 1

Second place at the end of the baton was received by the Brigade No. 3
Third place at the end of the baton was received by the Brigade №2

Introductory briefing before the start of the Relay

The implementation of phase 1 of "setting the station»
2 stage performance, processing and control of measurements

Conducting phase 3 "survey of the area»

The processing of the measurement results of 4 stages

Processing of data and calculation of the area of figure 5 Execution phase "of Downloading information from equipment»

Opinion on the open lesson of the Deputy Director on educational work Usmanova S. S.

Clear organization of the lesson. The teacher defines the goals and objectives of the lesson, provides motivation, uses a variety of forms and methods, means of visualization. Throughout the lesson, the teacher purposefully manages the activities of students, devotes a large part of self-employment. The lesson meets modern requirements

Also 27.02.17 competition was held on a speciality 3 course – "Working with optical plummet". Conducted teacher specials. disciplines of Samerkhanov S. G.

POSITION ON THE COMPETITION
"Working with optical collimator»
among the 3rd year students.

Team From each group in the competition can participate several artists.
The job: to Carry out the levelling and centering using the optical plummet.
Tools: Lot of machine.
Technique, tolerances according to the requirements of the instruction.
Time to perform the work 45 minutes (from the date of receipt of the job).

System of fines

Violation	Fine
Careless handling of the instrument	1 min.
Ignorance of the tolerances of the centring and levelling	3 min.
Deviation from the center of the sign more than 1 millimeter	3 min each
Deviation of each level bubble separately more than 0.5 divisions from the center	3 min.

Awards to Participants who won first place in the competition, was awarded a certificate.
The situation was developed a teacher of special disciplines of Samerkhanov S. G.

PROTOCOL
competition among 3rd year students
"Working with optical collimator»

№ p/p	Group	F. I. O.	Time			The time penalty	Total time	Place
			start	ending	work time			
1	301	Alibek Bekmukhametov	14:45	14:49	4 min.		4 min.	III
2		Lyazzat Khasenova	14:45	14:55	10 min.	3 min.	13 min.	V
3	302	Zhasulan Of Armakuni	14:45	14:47	2 min.		2 min.	I
4		Zhaksylyk Turysbekov Was	14:45	14:53	8 min.	3 min.	11 min.	IV
5	303	Sultan Saparov						
6		Damir Moldagaliev						
7	305	Rustam Maltsev	14:45	14:49	4 min.		4 min.	III
8		Ergazy Tokens	14:45	14:58	13 min.	6 min.	19 min.	VI
9	306	Kuanysh Ermekov	14:45	14:48	3 min.		3 min.	II
10		Sharapov Zhomart	14:45	14:58	13 min.		13 min.	V

The judges of the contest _____ Samarkhan S. G.

27.02.17 была выпущена геодезическая газета, составленная преподавателем Романовым А.В. Газета содержала задачи геодезического направления. Размещена на первом этаже.

Во вторник 28.02.17 состоялся конкурс: «Оригинальные геодезические знания - ОГЗ » среди учащихся 2курса. Провели конкурс в 21 аудитории преподаватели Ступак А.А. и Салимова Р.М.

Положение о проведении конкурса «Оригинальные геодезические знания» среди учащихся 2 курса (группы 201, 202, 203 204, 205, 206, 207).

Дата проведения: 28.02.2017г.
Цель конкурса: проверить умение учащихся вычислять обратную геодезическую задачу, выявить лучших вычислителей среди 2 курса.
Участники: От каждой группы в конкурсе принимают участие два студента.

Задание:
1.   Записать рабочие формулы.

2.   Выполнить чертеж дирекционных углов и румбов.

3.   Выполнить вычисление.

Инструменты: карандаш, линейка, ручка, калькулятор.
Время на выполнение задания: 10 мин.

Система штрафов:

№	Violation	Fine
1	The correction digit to the digit	2 min each
2	The lack of drawing	2 min.
3	No working formulas	5 min.
4	Error in calculations	2 min each
5	The entry on the compute font	1 min.

Task:
To calculate the directional angle and the length of the side CD by the known coordinates of points C and D (decision ZUS).

This:
XC = 5663728,24 m;
US = 7452322,46 m;
XD = 5652832,18 m;
УD = 7453116,33 M.

Find: αCD;   SCD.

PROTOCOL
competition among students of the II course
"The original geodetic knowledge»

№ p / p	Group	F. I. O.	Time			The time penalty	Total time	Place
			start	ending	work time			
1.	201	Ақышов Р.	15:35	15:50	$15^/$	$3^/$	$18^/$	
2.		Есхожин Т.	15:35	15:52	$17^/$	$14^/$	$31^/$	
3.	202	Казымов Е.	15:35	15:55	$20^/$	$8^/$	$28^/$	
4.		Слямулы А.	15:35	15:57	$22^/$	$12^/$	$34^/$	
5.	203	Абылханов Т.	15:35	15:50	$15^/$	$2^/$	$17^/$	
6.		Гаврилов И.	15:35	15:47	$12^/$	$2^/$	$14^/$	III
7.	204	Аскаров А.	15:35	15:44	$9^/$	$12^/$	$21^/$	
8.		Бекзатбекова Е.	15:35	15:50	$15^/$	-	$15^/$	
9.	205	ОлжабековҰ.	15:35	15:51	$16^/$	$2^/$	$18^/$	
10.		Хамбарханова А.	15:35	15:45	$10^/$	$1^/$	$11^/$	II
11.	206	Мерхатова М.	15:35	15:44	$9^/$	-	$9^/$	I
12.		Тарпанбаев Ғ.	15:35	15:45	$10^/$	$15^/$	$25^/$	
13.	207	Куспеков Ж.	15:35	15:46	$11^/$	$5^/$	$16^/$	
14.		Мукышев Е.	15:35	15:50	$10^/$	$13^/$	$23^/$	

On Wednesday 1.03.17 held a competition "Geodetic relay race" among 3rd year students. Was conducted by a teacher of special disciplines Shesternina Ie
The relay race included several stages.
Purpose: to develop creative abilities of students, to identify the best student.

Participants Geodetic relay

Strict fair jury

Results of the contest "Geodesic relay race»
At the stage of " Measuring horizontal angles by means of methods»
1 place was awarded to the student 302 g Cicimov D
At the stage of "Leveling IV»
1 place was given to the students 301 g Kusainova D. Urich T.
Team 1st place took the 302 group.

Thursday 2.03.17 a competition was held, specialty:
"The stakes for surveying" among students of the 4th course(401, 402, 403, 405, 406)

Conducted teacher specials. subjects: Medianova E. M.

Position on the competition
"The stakes for surveying" among the students of the 4th course
The purpose of the competition:to test the formation of computational skills, the ability to solve problems in geodesy; to raise interest in the subject; to use ICT, as well as to identify the best student among the 4 courses.

Team: from each group 1 student takes part in the competition.
Task: to Solve problems on the topic:
1) Item
2) OF THE EGP, ZUS, HP
3) Processing of logbooks: IVкласса leveling, horizontal and vertical angles.
4) processing of observation logs: measurement of zenithal distances, measurement of horizontal angles by circular reception, leveling class II.
5) Topographic plans and maps.

Tools: Magazines, topographic maps of scale 1:5000, 1:10000, 1:25000, scales, meter, calculator.
The design of the journal, calculations, tolerances in accordance with the requirements of the instructions.
The time to perform the task for 10 minutes, log processing 20 minutes.

System of fines

Violation	Fine
The correction numbers on the figure in the calculations	10 points. each
Error in calculations	10 points. each
Error in calculations due to errors made earlier	5 points. each
The entry on the compute font	10 points.
The design of the magazine	20 points. each

"The stakes for Surveying»

I. Organizational moment
Reinforcement of knowledge, skills, and problem-solving skills and process logbooks for geodesy
1. With each group involved one student-all participants of the competition 5 students.
2. Each student is given a card with a balance of 500 points. The participant chooses a certain category of problems by a certain coefficient from 1,50 - 2,00 and places his bet on the solution of this problem. All bets of the participants will be recorded in their cards as well as on the interactive whiteboard. If the contestant has correctly solved the problem, his bet increases by this factor.
3. The winner is the participant whose bid to address the challenges scored the most points.

II.   Task category
1. Category item
1. Nomenclature of 2.00
Determine the geographic coordinates of the corners of the frame Tracii on a given item.
K– 43 – 58 – A-b-4 (Scale 1: 10000).
2. The item is 1.75
Determine the geographic coordinates of the corners of the frame Tracii on a given item.
K– 43 – 58 – a-b (Scale 1: 25000).
3. Nomenclature-1,50
Determine the geographic coordinates of the corners of the frame Tracii on a given item.

K– 43 – 58 – A (Scale 1: 50,000).
2. Object category of the EGP, ZUS, HP
1. Inverse - 2,00
Given the coordinates of points A and B.
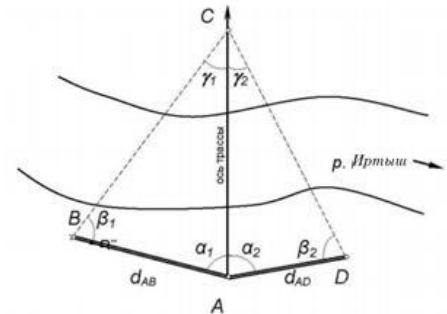HA = 247.32 m; UA = 870.54 m;
CW = 705.65 m; HC = 567.83 m;
1. Find the horizontal distance and the directional angle of the line AB (SAB?αAB -?).
2. 2. The unapproachable distance of 1.75
3. 3. Measured bases are given
dAB = 98.75 m, dAD = 98.48 m,
the measured angles in triangles ABC and ADC , . Calculate
the unapproachable distance of SAC.

Direct geodetic problem-1,50
Given the coordinates of the point a are HA = 125,00 m; UA
= 140.00 m; horizontal paving SAB = 124 m, the directional angle of the line AB is equal to AaB=
217014/23//.
Find the coordinates of a point In (XB -? HC? -).

Category processing case logs

Journal of the leveling of class IV – 1,5
Journal measurement of horizontal angles by method of techniques is 1.75
Journal semerene vertical angles – 2,00
Category processing case logs
Journal serenesense the distance of 1.5
The measurement log gorizontalnyj directions of the circular techniques of 1.7
Journal of the leveling of class II to 2.0

Category topographic plans and maps.
Scale 1: 100,000. – 2,00
Determine the coordinates of the points located on the map scale 1: 100 000.
kV (8816) Δ 165.6
kV (7014) · 237.3
Scale 1: 25,000. Is 1.75
Determine the coordinates of the points located on the map scale 1: 25 000.
kV (6910) 216,4 Δ G. Dubrovina
kV (7009) Δ 198,4
Scale 1: 10,000. – 1,50

To determine the coordinates of points located on a map of
scale 1: 10 000.
kV (6812) 212,8 Δ g Mihailivska
kV (6611) ·160,6 g Andovska

photo report from the contest

On Thursday 2.03.17 in the Assembly hall was held a joint class hour on the theme: "Good and evil is your moral choice" among 2nd year students

On Friday 3.03.17 was held a competition of presentations for 2nd year students
 «Architectural masterpiece»
the time of the scheduled lesson.
 Responsible teacher Romanova I. P.
Purpose: to develop feelings of creative activity, to increase interest in the profession, to reveal abilities of students.
Participants: 201, 202, 207 groups
Task:
1. Using Internet data to search for material for the construction of facilities of global importance
2. To make the presentation.
3. Presentations to demonstrate during the lesson the OFFICE.

According to the results of the contest prizes were distributed as follows:
1st place – Kamuli Askar 202 group

Presentation topic: Masterpieces of world architecture

So same in pyatnitsu2.03.17 a seminar – round table was held for teachers of the College. Information on the courses prepared teachers Balagurov M. S., Stupak A. A., Salimov R. M.
Terrestrial laser scanner (TLS) is the shooting system to measure with high speed (from a few thousand to a million points per second) the distance from the scanner to the object surface and recording the corresponding direction (horizontal and vertical angles) with the subsequent formation of three-dimensional images (scans) in the form of point clouds.
The essence of surface laser scanning and its advantages.
The terrestrial laser scanning system consists of a radar station and a field personal computer with specialized software. The radar consists of a laser rangefinder adapted for high-frequency operation and a laser beam scanner. As a scanner in NLS are the servo motor and a polygon mirror or a prism. The servo deflects the beam by a predetermined value in a horizontal plane, turning the entire upper part of the scanner, which is called the head. Scanning in a vertical plane is carried out by rotating or swinging the mirror.
The scanning process records the direction of the laser beam propagation and the distance to the object points. The result of the radar is a bitmap image-scan, the pixel values of which are elements

of the vector with the following components: the measured distance, the intensity of the reflected signal and RGB-component that characterizes the real color of the point. For most radar models, the characteristics of the real color for each point are obtained using a non-metric digital camera.

Another form of presenting the results of ground-based laser scanning is an array of laser reflection points from objects in the scanner's field of view, with five characteristics, namely spatial coordinates (x, y, z), intensity, and real color.

The basis of the laser rangefinder used in the radar is based on pulse and phase non-reflective methods for measuring distances, as well as the method of direct angular sweep (triangulation method).

The advantages of terrestrial laser scanning.

In addition to a high degree of automation, ground-based laser scanning also has the following advantages over other methods of obtaining spatial information:

* ability to determine the spatial coordinates of the object points in the field;
* three-dimensional visualization in real time, allowing at the stage of field work to determine the "dead" zone;
* non-destructive method of obtaining information;
• no need for the scan points of the object with two design centres (standing), in contrast to the photogrammetric method;
•   high measurement accuracy;
* the principle of remote information provides the safety of the contractor when shooting hard-to-reach and dangerous areas;
* high performance radar reduces the time of field work in the creation of digital models of objects, which makes this technology more cost-effective than others;
* works can be performed under any lighting conditions, that is, day and night, as the scanners are active shooting systems;
• high level of detail;
• multi-purpose use of results of laser scanning.

Applications of ground-based laser scanning.

* construction and operation of engineering structures:
control over compliance of geometrical parameters of newly constructed objects and design documentation for these objects;
adjustment of the project during construction;
as-built survey during the construction process and after its completion;
optimal planning and control of the movement and installation of structures and equipment;
monitoring of changes in the geometrical parameters of operated structures and industrial installations;
updating the General plan and reconstruction of the lost construction documentation of the existing facility.
•   mining:
determination of the volume of workings and warehouses of bulk materials;
creation of digital models of open pits and underground workings for the purpose of their monitoring (data on intensity of the reflected signal and real color allow to create geological models);
surveying support of drilling and blasting operations;
•   gas industry:
creation of digital models of commercial and complex technological objects and equipment for their reconstruction and monitoring; [1]
calibration oil aboveground storage tanks and tanks of tankers;
•   architecture:
restoration of monuments and structures that have historical and cultural significance;

creation of architectural drawings of facades of buildings;

restoration, repair, furnish, re-equipment of internal rooms or separate elements of a decor;

• development of measures on prevention and liquidation of consequences of emergency situations

* topographical survey of areas with a high degree of development

•   shipbuilding

* modeling of different types of simulators

* creation of two-dimensional and three-dimensional geographic information systems of enterprise management

• fixing of road accident and crime scenes.

The quality of work with the radar depends on the illumination, i.e. the higher the illumination of the object, the better the work will be done.

When monitoring deformations of high-rise buildings the quality of the work performed depends not only on illumination but also on the security of the place of work of geodetic points, the distance of the standing point of NLS from the building and height of the building.

Decision:

1. The results of the week of the Commission is considered considered. Events of the week were held at a good professional level.

7 March 2017. _____ /Churina T. Yu./