	Steering and Suspension AUTO114N Spring 2020
Department	Industry and Transportation
Instructor	Tim Hogan
NCC Email	thogan@ccsnh.edu
Telephone Number	603-578-6885
Office Hours	Tues+Thurs 3:00-3:50 Wed+Fri 2:00-2:50
Office Location	Automotive Building, new office

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# **Essential Questions:**

What is the function of the steering and suspension system?

73-70: C-69-67: D+ 66-64: D 63-60: D-Below 60: F

# **Available Support Services**

Tutoring, The Writing Center, Available Academic Services: The Academic Success Center | Room 100 offers academic support services which are open to all NCC students looking for additional help with their college assignments. Math tutoring and writing assistance are available. The Writing Center is for any student seeking assistance with the writing process for any class, not just College Composition. For more information and to view the tutoring schedules view here: http://www.nashuacc.edu/student-services/academic-success-center

Classroom Accommodations: Students who have a documented disability (physical, learning, or mental health) and require reasonable classroom accommodations must meet with the Disabilities Support Coordinator to set up a NCC Reasonable Accommodation Plan (RAP). If you had an IEP or 504 in high school, you may qualify for a plan. If you would like more information or if you are not sure if you qualify for a plan, please contact Jodi Quinn, Disabilities Support Coordinator, located in The Academic Success Center (Room 100), 603-578-8900 ext. 1451. View additional information and the application here: <a href="http://www.nashuacc.edu/student-services/academic-success-center/disability-services">http://www.nashuacc.edu/student-services/academic-success-center/disability-services</a> In order to receive classroom accommodations, it is the student's responsibility to meet with his/her instructor privately and provide a hard copy of the signed Reasonable Accommodation Plan (RAP) each term the student wants to utilize classroom accommodations even if the student has had that instructor in a previous term.

Audio Record Classroom Lecture: Please note that as a student in this class, you may have a classmate who by permission can audio record class lectures for his/her learning purposes. Only students with prior written permission from the instructor or the Disabilities Support Coordinator may audio record class lectures for educational purposes only. Students who audio record class lectures are prohibited from selling, transcribing, or distributing the recordings in any manner and are asked to delete the recordings when it is no longer essential for their learning purposes.

Title IX Statement: Classroom instructors at Nashua Community College are encouraged to create and maintain a safe learning environment in which students feel able to share opinions and related life experiences in classroom discussions, in written work, and in meetings with professors. To the greatest extent possible, this information will be kept private. However, staff and faculty have a legal obligation to report information concerning sexual misconduct,

may withdraw a student from the course with an "AF" grade. Please note that absences, tardies, and leaving class early all count towards "missed class time."

Students should also understand an AF grade can be assigned by an instructor or an administrator

communication includes, but is not limited to, policy announcements, registration and billing information, schedule changes, emergency

incident, this could range from a warning to a loss of credit for the assignment. In all cases of plagiarism, the student's advisor will be notified and the incident will be documented. If any further incidents of plagiarism are reported to the student's advisor, additional sanctions will be imposed. These may include notification of the Vice President of Academic Affairs; loss of credit for the course; suspension or dismissal from a department program; academic probation; and/or expulsion from the College.

Credit Hour Guid3.12ur iredo7.91heedr oor,

Week	Month /	Topic	Assignments due	Targeted
	Day			Competencies*

1	(Tuesday) Jan 2	Monday, Martin Luther King Jr., no classed	es	Lab safety, PréAlignment Inspections
2	Jan 28	Chapter 112 Suspension Components		PreAlignment inspections and select component replacement
3	Feb4	Chapter 112 Suspension Componen2s Day 1 Quiz 114- Day 2 review quiz	Chapter Quiz -110	PreAlignment inspections and select component replacement

4 Feb114

This schedule is subject to change. In the event of class cancellation due to inclement weather or instructor illness, students are directed to the course

Canvas site for an all ternate assignment for that da

	AUTO122N Automotive Brake Systems Spring 2020
Department	Industry and Transportation
Instructor	Jason Felton
NCC Email	jfelton@ccsnh.edu_
Telephone Number	(603)578-8950
Office Hours	Monday 2:00 - 4:00 Tues and Thurs 2:00 - 3:00
<b>GBC</b> L-a 262.ts42. <b>£c4.u58</b> Tues a	
	<b>– 1:50</b>
	Lab Thurs 8:00 – 11:50
Class Location	Lecture: H287 Lab: Auto Building

#### Rationale:

The students in this course will learn how the braking systems in vehicles work and how to properly repair them

#### Course Description:

The study of braking systems with an emphasis on the diagnosis and repair of hydraulic systems, disc and drum brakes, the machining of rotors, brake drums, brake line fabrication, ABS and stability control. Due to the safety nature of this course, students must earn a minimum of a C to continue.

### Course Competencies:

Develop a working knowledge of automotive brake mechanical and hydraulic systems

Develop an understanding of brake friction systems

Develop an understanding of brake measuring and machining equipment

Develop an understanding of brake system hydraulics

Develop an understanding of brake test equipment

Develop safe work habits and respect for shop equipment and personnel

#### Make Up Policy:

Not all missed work is eligible for make- up. It is the student's responsibility to inquire abou t missed work at the first class meeting after returning from an absence. The instructor will determine eligibility and provide an appropriate assignment. Any approved assignment must be completed and turned in as directed. There is no provision for make- up of a midterm exam, final exam, or lab practical exam.

#### Homework:

Self-study assignments are required. Some are listed in the course calendar, some will be assigned throughout the semester. Chapter end questions assigned per the course calendar are due at the beginning of the first class meeting of the week assigned. Chapter -end questions should include the question number, answer letter as well as the related answer text. Please include the chapter number on your answer sheet.

Scheduled homework assignm ents are combined into the equivalent of two test grades. Assignments passed in one class late will be accepted at reduced credit. Assignments will not be accepted more than one class late.

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Additional information including resources can be found at: New Hampshire Coalition Against Domestic and Sexual Violence: <a href="http://www.nhcadsv.org/Catchment%20map(1).pdf">http://www.nhcadsv.org/Catchment%20map(1).pdf</a>

Department Policies

Cellphones, laptops, tablets and other electronic equipment should be shut off during class unless previously approved by instructor.

### Required Tools:

All students are required to possess hand tools per the Required Tool List Each student is expected to have the tools available for each lab session. The instructor reserves the right to refuse admission to (or dismiss from) lab any student who is not regularly prepared with the required tools. All tools should be at the college no later than the first Monday in October.

Students Who Wish to Provide "Live" Shop Work
Any student who wishes to service an outside vehicle (whether owned by
the student or no t) during a lab must obtain prior permission from the
instructor. Any charges incurred are due and payable immediately.
Current students may be granted a "one school day" grace period,
however any student with an excessively delinquent auto bill may be
bar red from taking a midterm, final, or lab exam. Instructors reserve the
right to secure pre -payment for any invoice expected to exceed \$100.

Students are expected to attend all their regularly scheduled classes, laboratory periods, and other academic exercises. Should an absence from regularly scheduled academic exercise be unavoidable (beyond a student's control), it will be the student's responsibility to communicate with the professor, preferably beforehand, concerning the absence. Documentation of said absence may be required by the professor.

Students are advised that absence from class, for whatever reason, does not excuse them from meeting course requirements and objectives.

If a student is absent more than six hours (for a four-credit course, the total is eight hours) of class time during the term or semester, the instructor may withdraw the student from class using an AF grade, which means an F will be averaged into the GPA. In addition to absences from class, tardiness and leaving class early also calculate into missed class time. To avoid this AF, if a student cannot continue to attend class for any reason, he/she should obtain a withdrawal slip from the registrar and follow the process to officially withdraw. Students should also understand an AF grade can be assigned by an instructor or an administrator at any time for reasons other than poor grade performance or failure to meet attendance requirements e.g., violation of the Student Code of Conduct, disruptive behavior, etc. Students should refer to the student handbook for additional information about the AF policy.

It is the responsibility of the student to make up any missed class work, homework assignment, quizzes, or tests in accordance with the instructor's make -up policy.

Depending on the instructor's policy, late papers may or may not be

click on the icon. Students can also find guides, videos, and a Canvas community by clicking on the CCSNH Resources icon on the tool bar at the left of the Canvas screen then choosing Canvas Resources.

To directly link to Canvas On Demand tutorials, please visit the following link:

https://community.canvaslms.com/community/answers/guides/video -guide#jive\_content\_id\_Students

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If class is ever cancelled because of instructor illness or inclement weather, students will need to check Canvas for their assignment.

College Email System: Nashua Community College has established a College electronic mail ("email") system as a means of the College sending official information to enrolled students, and for students to send communication to their instructors and College personnel. All students registered at NCC will be assigned a College email account/address to be used as the only email address for all email communication: 1) sent to the students from their instructors and from all College personnel; and, 2) sent by the students to their instructors and to all College personnel.

#### In addition:

- Students should check their College email account regularly to ensure they are staying current with all official communications. Official communication includes, but is not limited to, policy announcements, registration and billing information, schedule changes, emergency notifications and other critical and time sensitive information.
- Students should also check their college email account to be sure that they are current with all email communication from their faculty.
- The student email account/address should be the only eaddress students use to send email to faculty and College personnel so that student email is recognized and opened.
- This service is provided exclusively to the students of NCC. Accounts are for individual use only, and are not transferable or to be used by any other individual.

### Course Calendar

Week of	LECTURE/DISCUSSION	LAB	ASSIGNMENT
Jan 20 MLK day	Chapters 92 + 93 Braking System Law and Principles	Brake Component Identification	Ch. 92 +93 Quiz Questions
Jan 27	Chapter 94 Brake Hydraulic Systems	Hydraulic System Component I.D. and Troubleshooting	Ch. 94 Quiz Questions
Feb 3	Chapter 95 Hydraulic Valves and Switches	Hydraulic Valve and switch I.D.	Ch. 95 Quiz Questions
Feb 10	Chapters 96 + 97 Brake Fluid, Lines and Bleeding	Brake line flaring, bending and bleeding	Ch. 96 + 97 Quiz Questions
Feb 17	Chapter 99 Drum Brakes	Drum Brake Component I.D. and operation	

This schedule is subject to change. In the event of class cancellation due to inclement weather or instructor illness, students are directed to the course

Canvas site for an alternate assignment for that day.

### Rationale:

Develop safe work habits and respect for shop equipment and personnel

# **Course Description:**

Theory of operation and diagnosis of the intake and exhaust systems, computerized fuel delivery systems and ignition systems are covered. Testing of these systems with use various pressure gauges, lab scopes and multi-meter will be cover in lab.

# Course Competencies :

Competency (Knowledge and Skills)	Critical Thinking Level	
Students will be able to:		

What kind of specialty equipment should I be using while performing work of this nature?

What could be the result of not using the proper equipment or safety precautions while performing work of this nature?

# Required Textbook(s):

Automotive Technology: Principles, Diagn osis and Service; 5th Ed. 2016

ISBN#9780133994612

### Supplemental Materials:

Access to Electude.

NCC Syllabus Template

absence. The instructor will determine eligibility and provide an appropriate assignment. Any approved assignment must be completed and turned in as directed. There is no provision for make- up of a midterm exam, final exam, or lab prac tical exam.

#### Homework:

Self-study assignments are required. Some are listed in the course calendar, some will be assigned throughout the semester. Chapter end questions assigned per the course calendar are due at the beginning of the first class meeting of the week assigned. Chapter -end questions should include the question number, answer letter as well as the related answer text. Please include the chapter number on your answer sheet.

Scheduled homework assignments are combined into the equivalent of two test grades. Assignments passed in one class late will be accepted at reduced credit. Assignments will not be accepted more than one class late.

Any assignment turned in via e- mail will be accepted provided it is mailed prior to the due date/time.

### **Grading:**

Please refer to your department grading scale.

Note: If you give a participation grade, you will need to provide students with a rubric that explains how this grade is calculated. Participation can count for no more than 15% of the final course grade.

### **Available Support Services**

### Available Support Services

Tutoring ,The Writing Center, Available Academic Services: The Academic Success Center | Room 100 offers academic support services which are open to all NCC students looking for additional help with their coll ege assignments. Math tutoring and Writing assistance are available. The Writing Center is for any

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Additional Student Support Services: Information on additional support services for NCC students can be found at http://nashuacc.edu/student- services/where - to-find -assistance -at -ncc

# Department Policies

Cellphones, laptops, tablets and other electroni c equipment should be shut off during class unless previously approved by instructor.

#### Required Tools:

All students are required to possess hand tools per the Required Tool List. Each student is expected to have the tools available for each lab session. The instructor reserves the right to refuse admission to (or dismiss from) lab any student who is not regularly prepared with the required tools. All tools should be at the college no later than the first Monday in October.

Students Who Wish to Provide "Live" Shop Work

Sensitive Materials Policy: During the semester, in order to cover certain academic topics, there may be occasions to view or discuss material which may not meet the student's own personal definition of appropriateness. At such times, every student has the right to decide not to participate. Every effort will be made by the instructor to notify students in advance of when such sensitive material will be used so that students can make alternative arrangements. Faculty will guide students in the identification of alternate learning oppor tunities consistent with relevant course objectives so that students opting out of scheduled "sensitive" learning experiences will not be penalized academicall0.002 Tcembaavlcl nd b(nt)b brzn

# TO185 Course Calendar (Tentative) Spring 2020

Week #	Week of	DISCUSSION	LAB	ASSIGNMENT
1	Jan 20 MLK day	er 18 le Operation, pecification	Shop Safety Engine fundamentals Compression Testing	<u>Due THU</u> - Ch. 18 quiz questions
2	Jan 27 oto	er 19 \$p4.3 etc5 73.08 Poperation	Btoloo03 (1)6 115ne design, operation and troubleshooting	<u>Due TUE</u> - Due THU -

# Rationale:

Develop safe work habits and respect for shop equipment and personnel

# Course Description:

### **Essential Questions:**

What Safety precautions should I practice while performing work of this nature?

What kind of specialty equipment should I be using while performing work of this nature?

What could be the result of not using the proper equipment or safety precautions while performing work of this nature?

# Required Textbook(s):

Automotive Technology: Principles, Diagn osis and Service; 5th Ed. 2016

ISBN#9780133994612

### Supplemental Materials:

Access to Electude.

# **Course Expectations:**

Attendance:

Class attendance is considered essential to academic success of students. Since there are constant learning opportunities between faculty members and students, and between students and other students within the classroom or lab, it is expected that students will attend each meeting of each course in which they are enro led. In addition, the lesson disruptions caused by late arrivals and the resulting missed material is likely to negatively impact each student's learning experience. The instructor reserves the right to refuse admission to any student who repeatedly arrives late for class or lab. Attendance information is typically collected

student seeking assistance with the writing process for any class, not just College Composition. For more information and to view the tutoring schedules view here: <a href="http://www.nashuacc.edu/student">http://www.nashuacc.edu/student</a> -services/academic -success-center

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uSafeUS https://usafeus.org/app3/webviewer.html

Bridges <a href="https://www.bridgesnh.org/">https://www.bridgesnh.org/</a>

Additional Student Support Services: Information on additional support services for NCC students can be found at http://nashuacc.edu/student-services/where-to-find-assistance-at-ncc

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# College Policies

AF Policy: If a student misses more than the number of hours the course meets during a two -week period (e.g. six hours for a three credit course) , the faculty may withdraw a student from the course with an "AF" grade . Please note that th (r)9.sire adelsir

Vice President of Academic Affairs and/or removal from the course with AF grade.

An "AF" grade is calculated in the GPA as an "F". Students should refer to the student handbook for additional information about the AF policy.

Canvas: All instructors at NCC will be using Canvas. Canvas is the online learning management system used by instructors and learners at Nashua Community College. Instructors may post syllabi, course related documents and grades in Canvas. Students may be required to submit assignments and/or take assessments through Canvas and/or participate in discussion boards.

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https://community.canvaslms.com/community/answers/guides/videoguide#jive\_content\_id\_Students

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 Students using their College email account do so under the policies set forth in the Student Handbook under "Student Computer Conduct Code".

Sensitive Materials Policy: During the semester, in order to cover certain academic topics, there may be occasions to view or discuss material which may not meet the student's own personal definition of appropriateness. At such times, every student has the right to decide not to participate. Every effort will be made

### **Credit Hour Guidelines**

- 1. A credit hour shall be the equivalent of one (1) hour of classroom or direct faculty instruction and a minimum of two (2) hours of out -of-class student work each week for 15 or 16 weeks.
- 2. A credit hour shall be allocated based on the following:

Category	Contact Hours per Week	Contact Hours per Sem. (based on minimum 15 week semester)
Class	1	15
Laboratory	2 or 3	30-45
Clinical	3 to 5	45-75
Practicum, Fieldwork	3	45
Internship	3 to 6	45-90
Со-ор	Variable by Dept.	Variable by Dept.

	AUTO221N Automotive Heating and A/C Spring 2020	
Department	Industry and transportation	
Instructor	Jason Felton	
NCC Email	jfelton@ccsnh.edu	
Telephone Number	(603)578-8950	
Office Hours	Monday 2:00 - 4:00 Tues and Thurs 2:00 - 3:00	
Office Location	Automotive Office	
Class Days/Meeting Time	Class Tues and Thurs 3:00 – 3:50	
	Lab Monday 8:00 - 11:50	
Class Location	Lecture H 286	
	Lab Auto Building	

#### Rationale:

Climate control systems maintain a comfortable environment for the drive and passage of vehicles. This adds to the safety of the driver. These systems also maintain the proper operating temperature of the vehicle's engine. Servicing the AC system requires — a license which is built into this course. Completion of the course will give the student the skill to diagnosis these systems and the license to repair them. Making the student much move valuable to an employer.

### Course Description:

The theory and oper ation of automotive heating, ventilation and air conditioning systems will be covered including safety, maintenance, adjustment, diagnosis andhe so. M dipy7aemtinge,licaineov. M dconditioningætmponent repair an safety, recovery, recycling and recharge will be covered

#### Course Competencies:

The student will learn to perform the tasks of a service technician in a safe, clean, neat and ethical manner.

The student will learn the theory of operation of automotive heating, ventilation and air conditioning systems including environmental concerns.

The student will learn proper diagnosis and repair procedures for automotive heating and ventilation systems.

The student will learn the proper diagnosis and repair proced ures for Automotive air conditioning systems.

The student will learn to properly diagnose and repair manual heating, Ventilation and air conditioning controls.

The student will learn to properly diagnose and repair automatic climate Control system controls.

The student will learn the proper procedures for the safe handling of refrigerants used in automotive air conditioning systems.

#### **Essential Questions:**

What is the most effective way to repair the vehicle? Cost vs. Time vs. Risk What is the root cause of the failure you are repairing? Are there updated parts to address this issue?

### Required Textbook(s):

Today's Technician
Automotive Heating & Air conditioning
Mark Schnubel
ISBN: 9781-305-49760-3

## Supplemental Materials:

Notebook and something to write with Tool kit

#### Course Expectations:

We understand that sometimes "life happens" and you cannot get to class on time or at all but, all students are expected to attend each class for the full amount of time scheduled. It is an important part of your education and we want you to be successful.

All lectures and labs begin on the hour.

that class. This will result in an absence and be co unted towards the attendance policy for the AF grade.

Absences: Any student that will miss a class should notify the instructor by phone or email prior to the beginning of the class. All absences will result in accrued time towards the AF policy. Students are responsible for any make -up work, missed quizzes and exams due to absence. It is the instructor's discretion to allow make -up work, take a quiz or exam.

In this section, you must include your <u>late work policy AND your make up policy</u> unless your de partment has specific requirements posted below. You should also list other expectations that will help students succeed in your course and allow your classroom to function smoothly.

- There is a large safety portion to the course both personal and environmental. Because of this all proper procedures must be followed. When in doubt, ask.
- As a rule, there is no make -up work. If you are not going to make a class be sure, your homework assignment has been completed.
   Most assignments will be on Canvas. If it is a paper assignment, include it in the email stating you are going to be absent and you

audio record class lectures are prohibited from selling, transcribing, or distributing the recordings in any manner and are asked to delete the recordings when it is no longer essential for their learning purposes.

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### Department Policies

Cellphones, laptops, tablets and other electronic equipment should be shut off during class unless previously approved by instructor. For example: lab tops/tablets are ok if you have purchased an electric copy of the textbook.

### Required Tools:

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chair; 3) referral to Vice President of Academic Affairs and/or removal from the course with AF grade.

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24/7 Canvas Support: To access support through email, phone or chat

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To directly link to Canvas on Demand tutorials, please visit the fo llowing link:

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- Students should check their College email account regularly to ensure they are staying current with all official communications. Official communication includes, but is not limited to, policy announcements, registration and billing information, schedule changes, emergency notifications and other critical and time sensitive information.
- Students should also check their college email acc ount to be sure that they are current with all email communication from their faculty.
- The student email account/address should be the only eaddress students use to send email to faculty and College personnel so that student email is recognized and opened.
- This service is provided exclusively to the students of NCC. Accounts are for individual use only, and are not transferable or to be used by any other individual.
- Students using their College email account do so under the policies set forth in the Student Handbook under "Student Computer Conduct Code".

Sensitive Materials Policy: During the semester, in order to cover certain academic topics, there may be occasions to view or discuss material which may not meet the student's own personal definitio appropriateness. At such times, every student has the right to decide not to participate. Every effort will be made by the instructor to notify students in advance of when such sensitive material will be used so that students can make alternative arra ngements. Faculty will guide students in the identification of alternate learning opportunities consistent with relevant course objectives so that students opting out of scheduled "sensitive" learning experiences will not be penalized academically in any w ay. Please note the opportunity to leave the classroom discretely is always available to each student when such sensitive material is being discussed. The student then has the responsibility before the next class meeting to inform the instructor as to the reason for leaving.

Plagiarism Policy: Plagiarism is a serious violation of a student's academic integrity and the trust between a student and his or her teachers. Plagiarism is the act of a person presenting another person's work as if it were his or her own original work. Such acts of plagiarism include, but are not limited to:

1. A student submitting as his or her own work an entire essay or other assignment written by another person.

- 2. A student taking word for word a section or sections of another person's work without proper acknowledgment of the source and that the material is quoted.
- 3. A student using statistics or other such facts or insights as if these were the result of the student's efforts and thus lacking proper acknowledgment of the original sourc e.
- 4. The paraphrasing of another person's unique work with no acknowledgment of the original source.
- 5. Copying another j -0.011-3 (e.)]TJ 0 T



Nashua College	Engine Repair AUTO228N Spring 2020	
Department	Industry and Transportation	
Instructor	Tim Hogan	
NCC Email	thogan@ccsnh.edu	
Telephone Number	603-578-6885	
Office Hours	Tues+Thurs3:00-3:50 Wed+Fri 2:00-2:50	
Office Location	Automotive Building, new office	
Class Days/Meeting Time	Tues and Thurs 1:00-1:50, lab Fri 8:00-1:50	
Class Location	Lecture H286	
	Lab Auto Bldg, main shop and Rm33	

## Rationale / Course Description:

modifications and specifics rega rding certain engine features that are manufacturer specific. This course is designed to meet all of the requirements for NATEF certificatio n in the Engine Repair section. The also a Capstone Assignment that is part of this course.

## Course Competen cies:

Understand basic engine theory to properly diagnose engine mechanical failures

Understand proper engine removal procedures

Understand proper teardown and cleaning procedures

Identify cause of failure and appropriate repair procedure

Understand proper engine repair processes

Understand proper reassembly procedures for engine mechanical parts

Understand how to safely and efficiently reinstall an engine

### **Essential Questions:**

What is the most effective way to repair the vehicle? Cost vs. Time vs. Risk What is the root cause of the failure you are repairing? Are there updated parts to address this issue?

# Required Textbook(s):

Automotive Technology Principles, Diagnosis, and Service Fifth edition James D. Halderman 978-0-12-399461.2

# Supplement al Materials:

Notebook and something to write with Required Tool kit

# Course Expectations:

We understand that sometimes "life happens" and you cannot get to

- With this class the jobs assigned for the lab tend to last multiple labs if not the entire semester. Time run out quickly. It is expected the stude nts use their lab time efficiently. This means the student should do research on parts, procedure, special tool etc outside of lab time. This will help to avoid wasting a lab/week because a part or tool was not on hand when needed.
- As a rule, there is no make up work. If you are not going to make a class be sure, your homework assignment has been completed. Most assignments will be on Canvas. If it is a paper assignment, include it in the email stating you are going to be absent and you will receive full c redit. Quizzes can be made up only if the was an email notifying the instructor of the absent. This must be made up prior to the next meeting of the class. It is the student s responsibility to do this.
- Most homework assignment will be end of chapter questions and will be on Canvas. Quizzes will be based on those homework assignments and giving in class on paper.
- All powerpoint/class presentations on Canvas for you to review
- Should you have any question or concern you can email me. I normally will ret urn an email within 48 hours.

## **Grading:**

Include a grade weight breakdown showing the specific components of the student's final grade. For example:

```
15% -- Homework from text book
15% --Quizzes
20% --Daily lab eval/Task sheets, please see the Daily Lab Eval uation sheet
25% -- Mid-term Exam
25% -- Capstone project
```

Grades will be assigned according to the department scale:

Point/letter grade equivalents:

```
100-94: A
93-90: A-
89-87: B+
86-84: B
83-80: B-
79-77: C+
76-74: C
73-70: C-
69-67: D+
66-64: D
```

63-60: D-Below 60: F

# Available Support Services

Tutoring, The Writing Center, Available Academic Services: The Academic Success Center | Room 100 offers academic support services which ar e open to all NCC students looking for additional help with their coll

encourage you to contact your NCC Title IX representative Lizbeth Gonzalez, 603-578-8900 x1528\_ or <a href="mailto:lgonzalez@ccsnh.edu">lgonzalez@ccsnh.edu</a> for support and assistance. You may also contact Bridges, the local crisis center, for free and confidential services at their 24hr support line 603- 883-3044. You do not need to be in crisis to I.Tc 0 Tw 10.478 2

may withdraw a student from the course with an "AF" grade . Please note that absences, tardies, and leaving class early all count towards "missed class time."

Students should also understand an AF grade can be assigned by an instructor or an administrator at any time for reasons other than poor grade performance or failure to meet attendance requirements e.g., violation of the Student Code of Conduct, disruptive behavior, etc.

Please be advised that if the behavior of any student (or students) continually disrupts the learning of his/her classmates, the following steps will be taken 1) verbal warning; 2) meeting with instructor and department chair; 3) referral to Vice President of Academic Affairs and/or removal from the course with AF grade.

communication includes, but is not limited to, policy announcements, registration and bil

incident , this could range from a warning to a loss of credit for the assignment . In all cases of plagiarism, the student's advisor will be notified and the incident will be documented. If any further incidents of plagiarism are reported to the student's advisor , additional sanctions will be imposed. These may include notification of the Vice President of Academic Affairs; loss of credit for the course; suspension or dismissal from a department program; academic probation; and/or expulsion from the College.

### **Credit Hour Guidelines**

1. A credit hour shall be the equivalent of one (1) hour of classroom or direct faculty instruction and a minimum of two (2) hours of out -of-class student work each week for 15 or 16 weeks.

Week #	Month /day	LECTURE/DISCUSSION	ASSIGNMENT DUE	Target Competencies
1	Tuesday Jan 21	How to buy a car To rebuild or not to rebuild Shop rules Chapter 1 and 2		Lab safety, Engine condition diagnosis
2	Jan 28	Chapter 26 Engine Condition Diagnosis	Ch.26 Chapter Qui <b>z</b> l-10	In vehicle servicing Chapter 2
3	Feb4	Chapter 28 Engine Removal and Disassembly	Ch.28 Chapter Quiz 10	Engine removal and disassembly
4	Feb11	Chapter 29 CleaningInspection and Crack Detection	Ch.29 Chapter Qui <b></b>	Cleaning, Inspection and Crack Detection. Measure cylinders Order Parts
5	Fed 18	Chapter Balancing and Blueprinting		CC'ing a head continued work Send blocks to machine shop
6	Feb 25	Chapter 30 Cylinder Head Service	Ch.30 Chapter Qui <b>₫-1</b> 0	Cylinder head inspection Warpage and valve guides
7	Mar 3	Chapter 31 Valve and Valve Seat Service	Ch.31 Chapter Qui <b>⊿</b> -10	Grind valves and cut seats
8	Mar 10	Review for MidTerm Mid-term exam	Review forMid-Term	Continue work on cylinder heads
	Mar 16-20	SPRING BREAK		
9	Mar 24	Chapter 32 Camshafts and Valvetrains	Ch.32 Chapter Quiz 10	Reassemble cylinder heads
10	Mar 31	Chapter 33 Pistons, Rings, Connection Rods	Ch.33 Chapter Quiz 10	Blocks backrom machine shop Measure and set piston ring end gap
11	Apr 7	Chapter 34 Engine Blocks	Ch.34 Chapter Qui <b>₫-1</b> 0	Clean and prep block for reassembly
12	Apr 14	Chapter 35 Crankshafts, Balance Shafts and Bearings	Ch.35 Chapter Quiz 1-10	Installcrankshaft, measure oil clearances and end play
13	Apr 21	Chapter 36 Gaskets and sealant 22 (ea)-7 Chapter 37 Engine assembly	Ch.36 Chapter Quiz-10 (s)-1079T8.66550-	Reassemble bottom enTm ()

This schedule is subject to change. In the event of class cancellation due to inclement weather or instructor illness, students are directed to the course

Canvas site for an alternate assignment for that day.

<sup>\*</sup>Targeted competencies refer to the established course competencies listed above.