

INTERNAL COMBUSTION ENGINES II EN4131

SYLLABUS and COURSE POLICIES

Instructor: Cdr. W. Eident, Professor, USCG licensed Chief Engineer, Steam Motor and Gas Turbine any horse power

Texts: Diesel Engines, volumes I and II, Kees Kuiken, Marine Engineering Work Books, Volume I, II, and III

Office hours: Monday, Wednesday, Friday, 1200 to 1300

Course goals:

1. Prepare the student to correctly start, operate and maintain a marine diesel engine.
2. Prepare the student to trouble shoot and repair a marine diesel engine.
3. Prepare the student to pass the USCG license exam for third assistant engineer, motor section.
4. Prepare the student to be a mature, thoughtful critically thinking professional.

Topics:

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| 1. Fuels and fuel injection systems | vol. I, chap. 8 and 9 |
| 2. Governors and engine speed control | vol. I chap. 15 |
| 3. Lubricants and lubrication systems | vol. I, chap. 11 |
| 4. Engine cooling systems | vol. I, chap. 10 |
| 5. Air intake systems | vol. I, chap. 12 |
| 6. Supercharging and exhaust gas systems | Hand outs in class |
| 7. Waste heat recovery and auxiliary boilers | Hand outs in class |
| 8. Starting and reversing and drive trains | vol. I, chap 13, chap 14 |
| 9. Engine emissions and control | vol. I, chap. 22 |

Affirmative action equal opportunity:

MMA is committed to providing reasonable accommodations to students with documented disabilities. Students who believe they may need accommodations in this class are required to contact Mr. Fran Tishkevich, Acting Director of Disability Compliance, within the first two weeks of class at ext. 2208 or by email at ftishkevich@maritime.edu.